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# The Development of the Interdisciplinary School Violence Prevention Assessment (ISVPA): Exploratory Findings of a Pilot Study

#### A Dissertation

Submitted to the Graduate Faculty of the University of New Orleans in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Counselor Education

by

Lauren B. Clark

B.A. Pace University, 2013 M.S. Monmouth University, 2016

August, 2022

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## **Dedication**

I dedicate my dissertation to my parents, Robert and Catherine Clark. Words will never be enough for me to truly convey how invaluable your support and encouragement have been to me throughout my doctoral and dissertation journey. I would not be the person I am without you and for that, I am eternally grateful.

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To my husband, I'm entirely grateful for you. You took a chance with me in moving to Louisiana so that I could pursue my goal and have never wavered in your support. Thank you for all that you do for me and Chitto (the very best pup).

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#### **Abstract**

School violence is a global concern. Although divergent disciplines (i.e., counseling, psychology, criminology, and sociology) have made efforts to address the concern, student violence continues to occur in schools. Currently, threat assessments are widely supported and utilized to prevent school violence by examining the contributing factors to a student's threatening communication or behaviors. The purpose of the present research was the initial development of the Interdisciplinary School Violence Prevention Assessment (ISVPA) to be used by school personnel with existing threat assessment procedures in order to connect students to counseling services. Several challenges were experienced during the research (i.e., COVID, Hurricane Ida) that required a significant shift in the research questions and data analysis (i.e., from parametric to nonparametric analyses and a pilot study). A sample of 27 school personnel (i.e., middle school teachers, principals, and school counselors) were the participants. The ISVPA validity and reliability were assessed through qualitative and quantitative evaluations by an expert panel, focus group, peer reviewers, and school personnel. The results for face and content validity were limited. For the initial ISVPA reliability findings, correlations for 24 items on the ISVPA frequency subscale ( $r_{\tau}$  = .50 - .85) and 27 items on the severity subscale ( $r_{\tau}$  = .50 - .83) were moderate to strong in strength and significant. Kendall's tau-b correlations varied from weak to very strong for internalizing problems ( $r_{\tau} = .23 - .84$ ) and externalizing behaviors  $(r_{\tau} = .37 - .92)$ . However, correlations for extreme beliefs  $(r_{\tau} = .21 - .95)$  and lack of attachment  $(r_{\tau} = .21 - .69)$  did not support reliability of the ISVPA. Further research is needed to establish validity and reliability of the ISVPA.

*Keywords:* Interdisciplinary School Violence Prevention Assessment, ISVPA, instrument development, school violence prevention, threat assessment

#### Chapter I

#### Introduction

Chapter I includes an overview of the research that supports the development of a school violence prevention instrument. The statement of the problem, purpose, and significance of the research are included. In the next section, an outline is provided of the conceptual framework used for the present research. Then, the research methods and questions, as well as the limitations and delimitations are provided. Finally, the assumptions in the present research, definition of terms, and a summary are provided.

#### Overview of the Research

School violence is a global concern in society and a national crisis in the United States (Anderson & Sabia, 2018; McMahon, 2020). The term *school violence* was first noted in 1992 as a way to describe a violent and aggressive act that occurred in a school (Furlong & Morrison, 2000). School violence is defined as "violent acts that disrupt learning and have a negative effect on students, schools, and the broader community" (Centers for Disease Control [CDC], 2021, para. 1). One of the first school violence incidents in the United States was in 1764, a shooting in Pennsylvania, known as the Pontiac Rebellion School Massacre that resulted in approximately 11 deaths (i.e., reports vary; k12Academics, n.d.; Dixon, 2005). Very recently in May, 2022, a school shooting occurred at a Texas Elementary School that resulted in 19 deaths of students and two teachers (Chavez et al., 2022). Based on the *Crime, Violence, Discipline, and Safety in U.S. Public Schools: Findings from the School Survey on Crime and Safety: 2017-18* report, in one academic year, roughly 962,300 violent incidents occurred nationally in schools, with 3,600 incidents involving a firearm or explosive device (Dilliberti et al., 2019). School violence

incidents include shootings as well as bullying, cyber bullying, physical altercations, and gang violence (CDC, 2021).

Societal fear and concern of school violence has led to various authoritative security measures in schools (e.g., zero tolerance discipline policies) and laws (e.g., gun-free schools); however, these efforts have been unsuccessful in preventing acts of school violence (Gaudiano & Mitchell, 2017). Many authors believe that authoritative efforts have failed to address the underlying problems or causal factors of school violence (Brooks, 2017; Cuellar & Theriot, 2017; Fisher, 2019; Reddy et al., 2001). As authoritative efforts have been ineffective, King and Bracy (2019) recommended a shift to more proactive and preventative efforts. School environments that proactively and effectively address problematic student behaviors through prevention efforts can lead to positive school climates and decrease the escalation of school violence (Cornell, 2020; King & Bracy, 2019). For example, the Comprehensive School Threat Assessment Guidelines (CSTAG) is a preventative, threat assessment approach that utilizes early detection of concern areas (e.g., bullying) and discourages the use of authoritative measures in schools (Cornell, 2020). When factors that impact students are assessed, students could be referred to counseling services, which could prevent school violence (National Association of School Psychologist [NASP], 2002).

A major concern related to school violence is the impact on the mental health of children and adolescents. According to Goodman-Scott et al. (2019), 80% of mental health concerns occur during childhood. Children and adolescent's environment and mental health are factors that could increase the potential for school violence as well as students' experiences of school violence can impact their mental health. As students develop and their life experiences increase, their internalizing problems (e.g., anxiety, depression, self-harm, and suicidal ideation; Malecki

et al., 2015; Terzian et al., 2011; Zahn-Waxler et al., 2000), externalizing behaviors (e.g., aggressive behavior and anger outbursts; Miller & Eisenberg, 1988; Willner et al., 2016), extreme beliefs (i.e., beliefs that condone or rationalize school violence; Trip et al., 2019), and lack of attachment with others (i.e., parents, peers, and school; Hirschi, 1969) can increase the likelihood of students committing acts of school violence.

Although 45% of pre-K-12 students who were diagnosed with a mental health problem underwent treatment, only 25% were shown to receive school-based treatment. Typical schoolbased counseling services use a reactive approach by targeting students at high risk who exhibit externalizing behaviors (e.g., behavioral problems, breaking school rules), resulting in the neglect of the remaining students, who may be experiencing internal problems (Gerald et al., 2016; Goodman-Scott et al., 2019; Hoover et al., 2018; Nadeem et al., 2011; Santiago et al., 2018) or lack of healthy attachment to others (Hirschi, 1969). Relevant research identified internalizing and externalizing behaviors as important factors to consider in adolescent psychopathology (Achenbach & Edlebrock, 1979; Miller & Eisenberg, 1988). In addition to focusing on students who exhibit externalizing behaviors and who are at high risk of school violence, taking a proactive approach to assess student factors; such as internalizing problems, extreme beliefs, or lack of attachment could prevent school violence. Although school-based counseling services are effective ways that benefit students, lack of training and knowledge of the negative factors that impact students may inhibit school personnel in helping students (Everly & Bienvenu, 2018). A proactive approach by school personnel needs to examine and assess the less overt factors that impact students, which create internal struggles and negative beliefs of students.

Awareness of students' behavioral and emotional health related to school violence has increased in the last two decades. One approach to identifying students who may become violent offenders is a psychological profile; however, a student profile for school violence is nonexistent and is not recommended because a profile could lend to problematic outcomes (e.g., stigmatizing students or creating bias; O'Toole, 2000; Silver et al., 2018). The utilization of terms related to risk or at risk can be misused and possibly lead to profiling a student. Additionally, relevant research has not supported this approach (Goodrum et al., 2018; O'Toole, 2000; Silver et al., 2018). Schulte-Körne (2016) recommended general approaches to school violence; such as mental health screenings, improvement in school climates, and teacher trainings on violence prevention. Specifically, universal mental health screening (UMHS) assessments are used to screen a group of students at certain times of the school year to address a specific concern (e.g., externalizing behaviors) or trend (e.g., absences) that is noticeable among all or groups of students (Foster et al., 2005; Goodman-Scott et al., 2019; Rowling & Weist, 2004; Siceloff et al., 2017). Although commonly utilized, UMHS assessments have limitations. UMHS assessments require time in screening and scoring for every student to be included that can be a deterrent for school personnel (Donohue et al., 2015).

In comparison to UMHS approaches that have a potential to profile a student based on risk factors and label students as *at risk*, multitiered step approaches are the preferred method for addressing school violence because they can be used as a proactive and preventative method to addressing school violence (NASP, 2002, 2014). School district policies that utilize a multitiered step approach, similar to a flow chart, has increased in the aftermath of school shootings (e.g., Columbine High School and Sandy Hook Elementary School; Cornell, 2007; NASP, 2002, 2014; O'Toole, 2000; Vossekuil et al., 2002). The NASP (2014) recommended a series of three steps to

employ threat assessment procedures in schools. The first step is to establish clear and specific district policies and procedures for responding to a threat made by students, which include identifying an evaluation protocol of a potential school violence offender. Ideally, an assessment that analyzes underlying and contributing factors to violence could be used in conjunction with existing multitiered threat assessments in order to provide a context outside the scope of the immediate situation (i.e., after the threat is made by a student). The second step is to create an interdisciplinary threat assessment team to collaboratively respond and examine threats made by a student. Through incorporating team members from different disciplines and backgrounds (e.g., principal, school counselor, and resource officer), biases can be reduced. Finally, the third step relates to educating the school community (e.g., teachers, students, and personnel) of the procedures and ways to increase a positive school climate.

Existing UMHS and multitiered approaches to violence prevention in schools are based on each discipline's research (i.e., counseling, psychology, criminology, and sociology), with a linear focus on school violence. In the disciplines of criminology and psychology, two commonly referred to threat assessments are the Virginia Model for Student Threat Assessment and the Salem-Keizer Threat Assessment System (Cornell, 2007; Salem-Keizer School District, n.d.; Van Dreal, 2011). Additionally, the National Center for School Mental Health (n.d.) provided a list of commonly utilized UMHS assessments in counseling and psychology disciplines (e.g., Systematic Screening for Behavior Disorders, Student Risk Screening Scale, Behavior Assessment System for Children, and Resiliency Scales for Children and Adolescents). However, screening assessments have the potential to profile a student as *at risk* negatively (i.e., by labeling student's or through confirmation bias of student's behaviors; O'Toole, 2000). Thus, current assessment methods lack an interdisciplinary approach to proactively and

comprehensively assessing the factors that impact a student without singling out a student as *at risk*, as well as existing assessments do not assess for both the frequency and severity of the factors that can impact a student (Borum, 2000; Canadian Institutes of Health Research [CIHR], 2005; Choi & Pak, 2006; Mayer & Jimerson, 2019; Reddy et al., 2001). Based on the concerns or problems with a student that is being addressed with a UMHS tool (e.g., externalizing behaviors) and the assessment method chosen, a student with other concerns or problems (e.g., internalizing problems or less overt concerns) may be overlooked. Whereas, effectively identifying the underlying and contributing factors (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) of student school violence from an interdisciplinary research base could contribute to a preventative assessment. Ideally, the assessment could assist school personnel in proactively connecting students to counseling services and needed support.

#### **Problem Statement**

According to the American Psychological Association (American Psychological Association [APA], 2009), roughly half of children and adolescents will experience a traumatic event (e.g., bullying, natural disaster, student suicide, and school shootings), with most of the traumatic events occurring in a school environment. Mitchell et al. (2016) reported that 54% of threats that occur in schools were made in person, 31% were made in person and through technology, and 15% were made through technology. Although school violence prevention and school safety efforts have increased following the 1999 Columbine High School shooting, school violence remains an area of concern (Goforth, 2019). According to the NASP (2002, 2014), the evaluation of a potential student offender in schools is one aspect to the overall threat assessment process. Assessment and evaluation of potential school violence offenders is one method of addressing the concern of school violence. However, when examining the frequency and severity

of a student's potential for school violence, current school violence assessments that are used alongside existing threat assessment procedures are unilaterally focused and lack an interdisciplinary approach (i.e., the process of synthesizing research across disciplines).

#### **Purpose of the Research**

Divergent disciplines (i.e., counseling, psychology, criminology, and sociology) have made valiant attempts to address the phenomenon of student school violence (Mayer & Jimerson, 2019). However, most attempts have remained linear within each designated discipline that lacks a cross-discipline or interdisciplinary analysis of how to address the concerns of school violence. An interdisciplinary school violence preventative assessment could be used to examine the contributing factors identified throughout the counseling, psychology, criminology, and sociology literature that impact students who may commit violence. According to the CIHR (2005) and Choi and Pak (2006), using an interdisciplinary research approach of analyzing and synthesizing ideas across disciplines can create a comprehensive understanding of a topic. The purpose of the present research was to develop an interdisciplinary school violence prevention assessment that examines the frequency and severity of factors that impact a student (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment). Ideally, the proposed instrument could be used in conjunction with existing threat assessment procedures to give background context (i.e., last 30 days) to possible problematic patterns. The background context could assist with assessing the nature of a threat communicated and the negative factors that have impacted a student. Using an instrument as proposed in the present research, school personnel may be able to identify less obvious and underlying factors that impact students and provide counseling services to decrease possible escalation of violence by a student (Reddy et al., 2001).

#### Significance of the Research

School violence is a global concern (Anderson & Sabia, 2018; Leuschner et al., 2011; Leuschner et al., 2017; McMahon, 2020). Although existing assessments target specific and individual components of school violence, such as in counseling, psychology, criminology, and sociology (e.g., evaluation of a communicated threat; O'Toole, 2000), currently an interdisciplinary (i.e., counseling, psychology, criminology, and sociology) approach to school violence assessment is not available (Borum, 2000; Mayer & Jimerson, 2019; Reddy et al., 2001). The use of psychological profiles that label a student as *at risk* has been deemed inappropriate and a potentially harmful method when addressing school violence (Goodrum et al., 2018; O'Toole, 2000; Silver et al., 2018). However, existing threat assessments are used to evaluate a threat after the threat is communicated by a student. According to the NASP (2002, 2014), an evaluative tool to assess a potential offender of school violence is one component needed in the overarching threat assessment process. An overarching need for an evaluative assessment that addresses contributing factors of school violence is evident.

In the present research, the proposed instrument, Interdisciplinary School Violence Prevention Assessment (ISVPA) could assist with assessing the background context of a student's internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment. The ISVPA could provide context within the last 30 days to identify factors that have impacted a student and reasons why a threat is being expressed by the student. Whether a threat is deemed transient (i.e., momentary or fleeting threat; Cornell, 2020) or substantive (i.e., concrete or significant threat; Cornell, 2020), the proposed instrument could also identify underlying or contributing factors to violence found across four disciplines (i.e., counseling, psychology, criminology, and sociology). Also, with the ISVPA, school personnel could better

identify less obvious and underlying contributors of school violence (e.g., internal distress, difficulty with emotional regulation, suicidal thoughts, depression, anxiety, extreme beliefs, lack of attachment, and antisocial personality traits) and refer students to counseling services that could assist students and likely decrease the overall escalation of violence (Reddy et al., 2001). The proposed instrument could be used by school personnel in addition to existing threat assessment procedures to proactively analyze the frequency and severity of a student's internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment.

#### **Conceptual Framework**

A strong theoretical foundation is an important component when conceptualizing research. A conceptual framework provides the context for interpreting the research findings (Adom et al., 2018). For the present research, two prominent theories: Hirschi's (1969) social control theory (SCT) and Beck's (1970) cognitive behavioral theory (CBT) were integrated to provide the conceptual framework for the development of an interdisciplinary school violence prevention assessment for students, the ISVPA. SCT and CBT have three similar elements that include an individual's thoughts, emotions, and behaviors.

#### **Social Control Theory**

In 1969, Hirschi developed SCT based on the sociology and criminology fields. His basic view of human nature was that individuals rely on free will with choices and responsibilities, which can result in negative or positive outcomes (Espelage & Hong, 2019; Kempf-Leonard & Morris, 2017). For some individuals, their choices result in aggressive and criminal behaviors; whereas conformity develops for others who socialize and abide by society's rules (Espelage & Hong, 2019; Hirschi, 1969). Individuals who have strong social bonds (Espelage & Hong, 2019) are impacted by four components; attachment to others, commitment to conventional goals,

involvement in conventional activities, and belief in conventional societal norms (Hirschi, 1969). Hirschi asserted that when adolescents' social bonds are weak or do not exist, they tend to behave in violent ways. Adolescent violence can occur because all adolescents have free will.

Adolescents can choose not to be violent or delinquent because of their attachment with others (i.e., parents, peers, and school), commitment to conventional goals, involvement in conventional activities, and belief in conventional societal norms. One or more weakened bonds in any of the four components increases the probability of delinquent or violent behaviors. Adolescents' *attachment* is "the extent to which a person [is bonded] to others" (e.g., parents, peers, and school; Hirschi, 2002, p. 19). When adolescents have healthy attachment with others, they are less likely to commit acts of violence for fear of the loss of respect and affection of others (Costello, 2010). Adolescents' attachment to parents is defined as is "[parental] supervision," "intimacy of communication...[and] affectional identification, love, and respect" (Hirschi, 2002, pp. 89, 91). Attachment to peers includes adolescents' positive and healthy relationships that have a strong influence in preventing adolescent delinquent behaviors (Hirschi, 1969; Leuschner et al., 2017; McGloin & Thomas, 2019; Sommer et al., 2014; O'Toole, 2000). Also, attachment to school is an adolescents' "academic competence," [positive] "attitudes toward school," and "concern for the opinion of teachers" (Hirschi, 2002, pp. 111, 129, 132).

Adolescents' *commitment*, the second component to social bonds, is the "educational and occupational aspirations...[that] limit one's opportunities to commit delinquent acts" (Hirschi, 2002, p. 29). Conventional goals are "related to the aspiration of going to college and attaining a high-status job" (Wiatrowski et al., 1981, p. 525) and are exhibited through academic performance, expression of career or college goals, and employment when relevant (Cretacci et al., 2018; Hirschi, 1969). Adolescents who invest time and effort in their future goals are less

likely to commit violence (Hirschi, 1969; Seo et al., 2018). The third component to social bonds is adolescents' *involvement* (e.g., academics, sports, careers, or other activities), defined as the "engrossment in conventional activities" (Hirschi 2002, p. 22). When adolescents are involved in positive and productive activities that serve to further social bonds with family, friends, and peers; they have limited or no time to be involved in violent behaviors.

Finally, adolescents' *belief*, the last component to social bonds, is "the idea of a common value system" when people conform to "the moral validity of the law" (Hirschi, 2002, pp. 26, 203). According to Hirschi (2002) "the less a person believes he should obey the rules, the more likely he is to violate them" and the social bond is weakened (p. 26). When adolescents' beliefs are extreme, they have "profound convictions opposed to the fundamental values of society, the laws of democracy and the universal human rights, advocating the supremacy of a certain group (racial, religious, political, economic, social, etc.)" (Trip et al., 2019, p. 1); and they are more likely to engage in violence (Hirschi, 1969). These four components of SCT interact and can insulate adolescents from deviant behaviors, violence, and crimes (Siegel & McCormick, 2006).

#### **Cognitive Behavioral Theory**

During the same timeframe as Hirschi, Beck pioneered CBT (Beck, 1976, 2011; Beck & Miller, 2012). Similar to SCT and one of the primary tenants of CBT is that individuals have thoughts (i.e., beliefs) that directly influence their emotions and behaviors (Don et al., 2019; King & Boswell, 2019). CBT emphasizes the triangulation of emotions with beliefs and behaviors that recognizes the role of negative emotions and how negative emotions can contribute to distress (Beck, 1970, 2011; Don et al., 2019; Geschwind et al., 2019; Peterson & Dutton, 2019). Individuals' beliefs are seen as a mediating force behind emotions that create changes in their behaviors (Beck, 1976; Don et al., 2019; King & Boswell, 2019). Beliefs and

emotions are internal processes; whereas, behaviors function externally in response to an individual's intrinsic belief (i.e., thought) dialogue.

In CBT, internalizing problems are the "core disturbance in intropunitive emotions and moods (e.g., sorrow, guilt, fear, and worry)" (Zahn-Waxler et al., 2000, p. 443). Whereas, externalizing behaviors are "the negative behaviors [that] tend to be expressed outwardly and are likely to directly affect other people and society at large...behaviors that seemingly reflect less awareness of or concern for the affective consequences of one's behavior for others" (Miller & Eisenberg, 1988, p. 325). The underlying mechanisms of negative emotions and extreme beliefs contribute to distress resulting in internalizing problems and externalizing behaviors (Beck, 2011; Don et al., 2019; Geschwind et al., 2019; King & Boswell, 2019; Liu, 2004; Malecki et al., 2015; Peterson & Dutton, 2019; Terzian et al., 2011; Zahn-Waxler et al., 2000). When adolescents have "a change in beliefs, feelings, and behaviors in directions that increasingly justify intergroup violence and demand sacrifice in defending the ingroup" radicalization occurs (McCauley & Moskalenko, 2008, p. 416). Internalizing problems and externalizing behaviors are seen as a result of extreme and radicalized beliefs (Beck, 2011). Although adolescents are directly impacted by their beliefs and emotions, all adolescents are viewed as having the capacity to change extreme beliefs and the resulting negative behaviors to improve their overall quality of life (Beck, 1976, 2011).

#### **SCT and CBT Integration**

For both SCT and CBT, positive beliefs and emotions result in productive behaviors that benefit individuals. Whereas, extreme beliefs have a negative impact on individuals' view of self or the world that result in violent or aggressive external behaviors (Beck, 1970, 2011; Farrington, 2019; Leuschner et al., 2017; O'Toole, 2000; Silver et al., 2018). An individual's internalizing

problems and extreme beliefs are viewed as having negative emotional effects and externalizing behaviors are the underlying and mediating forces that directly impact an individual (Beck, 1970, 2011; Beck & Miller, 2012; Liu, 2004; Trip et al., 2019). For both SCT and CBT; internalizing problems, extreme beliefs, and externalizing behaviors serve as a framework to describe contributing factors, such as school violence (Hirschi, 1969; Zahn-Waxler et al., 2000). The presence of internalizing problems, extreme beliefs, and externalizing behaviors coupled with the detachment of one or more of an adolescent's social bonds increases the likelihood of adolescent school violence (Hirschi, 1969; Trip et al., 2019; Zahn-Waxler et al., 2000).

#### **Overview of Methods and Research Questions**

When the present research was proposed in March 2021; a quantitative approach was planned to develop an interdisciplinary assessment for school violence, the ISVPA. Five main research questions were planned.

#### **Research Question One**

What is the overall factor structure of the Interdisciplinary School Violence Prevention Assessment (ISVPA)?

#### **Research Question Two**

What is the validity of the ISVPA to assess a student's risk level for school violence (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment)?

#### **Research Question Three**

What is the reliability of the ISVPA to assess a student's risk level for school violence (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment)?

#### **Research Question Four**

Is there a significant relationship between school personnel's demographics (i.e., age, gender, ethnicity, professional role, and grade level) and students' risk level of school violence (i.e., ISVPA scores)?

#### **Research Question Five**

Is there a significant relationship between school personnel's assessment of students' risk level for school violence (i.e., ISVPA scores) and students' demographics (i.e., age, gender, ethnicity, and grade level)?

#### **Limitations and Delimitations**

Limitations are an important consideration in research as they relate to an assessment. Sample size can be a significant limitation, specifically a small sample size and lack of heterogeneous participants can limit the generalizability of results (Morgado et al., 2017). For the present research, a limitation was that the sample size of the participants could be less than the ideal amount for a factor analysis (i.e., 10 participants per instrument item; Benson & Clark, 1982; Nunnaly, 1978) and if the sample demographics were too similar then generalizability of results are impacted (Morgado et al., 2017). Additionally, participant bias, extraneous variables, and issues with the assessment construction can contribute to limitations for an instrument (Morgado et al., 2017). In the present research, the limitation of participant bias could be related to participants' preexisting or unfair opinions towards students. Also, an extraneous variable such as school personnel's prior knowledge of school violence and participants utilizing technology to complete the research could be a limitation. Finally, the instrument construction could be a limitation because of the subjective analyses (e.g., expert panel review), lack of a

substantial literature review, and format of the assessment items (i.e., close ended prompts and lack the addition of short answer or open answer questions for each prompt).

As the data and research questions were based on the specific population of school personnel (i.e., sixth, seventh, and eighth grade teachers, principals, and school counselors) and data from other sources (e.g., parents, students, and other school employees) were not collected, the targeted sample for the current research was a delimitation. Statistical delimitations included the utilization of specific subtypes of validity and reliability rather than all types (Morgado et al., 2017). For the present research, two types of validity (i.e., content validity and construct validity) and two types of reliability (i.e., internal consistency and test-retest reliability) were planned to develop and analyze the assessment.

#### **Assumptions of the Research**

Assumptions of the research are an important consideration to the researcher. For the present research, an assumption was that school personnel would answer the instrument items for frequency and severity truthfully and genuinely to produce accurate subscale scores.

Additionally, when using an exploratory factor analysis, statistical assumptions included sample size (i.e., ideally 10 participants per item), homogeneity of the sample, inter-item correlations, and normality of the variables (i.e., important for the generalizability of results; Field, 2013).

#### **Definition of Terms**

**Attachment** is "the extent to which a person [is bonded] to others" (e.g., parents, peers, and school; Hirschi, 2002, p. 19).

**Attachment to parents** is defined as "[parental] supervision," "intimacy of communication... [and] affectional identification, love, and respect" (Hirschi, 2002, pp. 89, 91).

**Attachment to peers** is the overall quality of an individual's relationship with peers that presents as a positive or negative influence (Hirschi, 1969).

**Attachment to school** is an adolescent's "academic competence," [positive] "attitudes toward school," and "concern for the opinion of teachers" (Hirschi, 2002, pp. 111, 129, 132).

**Belief** is "the idea of a common value system" when people conform to "the moral validity of the law" (Hirschi, 2002, pp. 26, 203).

**Bullying** is defined as "when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons," adding "there should be an imbalance of in strength (an asymmetric power relationship)" (Olweus, 1994, p. 98).

**Commitment** is the "educational and occupational aspirations...[that] limit one's opportunities to commit delinquent acts" (Hirschi, 2002, p. 29).

**Direct suicidal ideation** is an expressed plan, intent, and means to die by suicide (National Institute of Mental Health [NIMH], 2019).

**Externalizing behaviors** are defined as "the negative behaviors [that] tend to be expressed outwardly and are likely to directly affect other people and society at large...behaviors that seemingly reflect less awareness of or concern for the affective consequences of one's behavior for others" (Miller & Eisenberg, 1988, p. 325).

**Extreme beliefs** are defined as "profound convictions opposed to the fundamental values of society, the laws of democracy and the universal human rights, advocating the supremacy of a certain group (racial, religious, political, economic, social, etc.)" (Trip et al., 2019, p. 1).

**High level threat** is defined as "the threat is direct and specific... the content of the threat suggests [the student] has taken concrete steps to carry out the threat... the identity of the threatener is known" (O'Toole, 2000, p. 30).

**Indirect suicidal ideation** is expressed hopelessness or self-destructive behaviors (NIMH, 2019).

**Interdisciplinary** is the "analyzes, synthesizes and harmonizes links between disciplines into a coordinated and coherent whole" (CIHR, 2005, p. 359).

**Internalizing problems** are defined as "a core disturbance in intropunitive emotions and moods (e.g., sorrow, guilt, fear, and worry)" (Zahn-Waxler et al., 2000, p. 443).

**Involvement** is the "engrossment in conventional activities" (Hirschi 2002, p. 22).

**Lack of Attachment** is "the process of becoming alienated from others [parents, peers, and school]" (Hirschi, 1969, p. 18).

**Leakage** "is the communication to a third party of an intent to do harm to a target" (Meloy & O'Toole, 2011, p. 513).

**Low level threat** is defined as the "threat is vague and indirect... lacks detail... the means to carry out the threat is unknown" (O'Toole, 2000, p. 28).

**Medium level threat** is "the threat is specific... however, it is unknown if [the students] actually intended to carry out the threat, and if the [means]... are real" (O'Toole, 2000, p. 29).

**Primary grievance** is "the cause of the active shooter's distress or resentment; a perception—not necessarily based in reality—of having been wronged or treated unfairly or inappropriately" (Silver et al., 2018, p. 21).

"Preventative, school counseling program...includes early warning systems for identifying students who may be engaging in harmful or risky behaviors" (American School Counselor Association [ASCA], 2017, para. 1).

**Radicalization** is "a change in beliefs, feelings, and behaviors in directions that increasingly justify intergroup violence and demand sacrifice in defending the ingroup" (McCauley & Moskalenko, 2008, p. 416).

**Risk factor** is "an empirically established relationship with a particular outcome" (Reddy et al., 2001, p. 164).

**Risk assessment** is the process that "evaluates the risk and protective factors present in a person and evaluates the risk for general and specific forms of violence (e.g., intimate partner violence, stalking)" (Goodrum et al., 2018, p. 123).

**School-based mental health services** "range from minimal support services provided by a school counselor to a comprehensive, integrated program of prevention, identification, and treatment within a school" (Committee on School Health, 2004, p. 1840).

**School violence** is "violent acts that disrupt learning and have a negative effect on students, schools, and the broader community" (CDC, 2021, para. 1).

**Stressors** are defined as the "...psychological, or social forces that place real or perceived demands/pressures on an individual and which may cause psychological and or physical distress" (Silver et al., 2018, p. 15).

**Threat** is as "an expression of intent to do harm or act out violently against someone or something" (O'Toole, 2000, p. 6).

**Threat assessment** is a "process [that] seeks to evaluate the likelihood a person will perpetrate 'targeted violence' (i.e., toward a specific person or group), such as an assassination or a school shooting" (Goodrum et al., 2018, p. 123).

## **Summary**

In the present chapter, an introduction of the present research was provided. Also, an overview of the present research, as well as the problem and purpose statements and the significance of the research were included. The conceptual framework and an overview of the research methods, including the five main research questions, limitations, and delimitations were provided. Finally, the terms were defined.

#### **Chapter II**

#### **Literature Review**

The purpose of this chapter is to review the existing research and literature related to the causes and contributors to school violence. Chapter II is organized into five main sections. In the first section, crisis counseling in schools is reviewed, including crisis models and crisis prevention stages. In the second section, the theoretical framework of adolescent development and violence with a focus on adolescents' internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment including the indicators of the four constructs are provided. In the third section, the literature on adolescent exposure to violence is provided. In the fourth main section, existing assessments of adolescent school violence are reviewed. Finally, a description of types of assessments used in schools is provided.

#### **Crisis Counseling in Schools**

School shootings began in the 1700s and have continued to escalate, with shootings increasing two times the average during 2017 and 2018, with 24 people killed in 2017 and 61 people killed in 2018 (ABC News, 2019; k12Academics, n.d.). According to the *Indicators of School Crime and Safety* report, during the 2018 to 2019 school year, 66 reported school shootings occurred that resulted in 29 deaths and 37 injuries (Musu et al., 2019). Students can be impacted by trauma in schools, such as school shootings as well as they themselves having the potential to commit violent behaviors in schools. School counselors and personnel have an important role in protecting students and their school environment. In response to the occurrence of school violence, school counselors and personnel have created and implemented various types of crisis models for prevention, planning, intervention, and postvention that target school violence and the impact that violence has on students. School crisis policies and models

contribute positively to safe school environments prior to acts of violence (ASCA, 2019; Poland & Conte, n.d.).

#### **Crisis Models**

The ASCA National Model (2019) has four specific standards that include school counselors' responsibilities. The first standard is to "Inform parents/guardians and/or appropriate authorities when a student poses a serious or foreseeable harm to self or others. When feasible, this is to be done after careful deliberation and consultation with other appropriate professionals [e.g., school counseling colleagues, counseling supervisors, or clinically based counselors] ... Even if the danger appears relatively remote, parents should be notified" (ASCA, p. 20). The second standard is to "Use risk assessments with caution. If risk assessments are used by the school counselor, an intervention plan should be developed and in place prior to... practice" (ASCA, pp. 20-21). The third standard is "Do not release a student who is a danger to self or others until the student has proper and necessary support. If parents will not provide proper support, the school counselor takes necessary steps...to seek help and at times may include a report to child protective services" (ASCA, p. 21). Finally, the fourth standard is to "Report to parents/guardians and/or appropriate authorities when students disclose a perpetrated or a perceived threat to their physical or mental well-being ... The school counselor follows applicable federal, state, and local laws and school district policy" (ASCA, p. 21).

For all school counselors, crisis response is a professional and ethical responsibility. Two additional leading models used in crisis work are Mitchell's *Critical Incident Stress Management* (CISM, Mitchell & Everly, 2010) and *Psychological First Aid (PFA) in Schools* (Brymer et al., 2012). The first model, CISM is a widely utilized and an empirically validated method for crisis situations (Mitchell & Everly, 2010). CISM utilizes a comprehensive system approach to a crisis

that can be applied with individuals, groups, and organizations, such as schools and families of school children. CISM utilizes an integrative approach to crisis prevention, intervention, and postvention that includes phases.

Initially in CISM, pre-crisis preparation occurs that includes effective stress management and crisis training. Trainings are provided for individuals in their environment and for the organization as a system, such as a school. In a qualitative study examining 140 school personnel's perceptions on the effectiveness of CISM, Morrison (2007) found that the majority of personnel viewed CISM as a structured guideline to crisis management that utilizes a comprehensive language for ease of understanding. Once a crisis incident occurs, the intervention phase includes initiating informational meetings and supportive programs. In CISM, Critical Incident Stress Debriefing (CISD) is a group-based approach that is used shortly after a crisis situation occurs to address any resulting symptoms of survivors who were impacted by the crisis (Mitchell & Everly, 1996). After CISD is implemented for acute symptoms, users of CISM continue individual crisis counseling with survivors to process the aftermath of the crisis situation. Family crisis counseling, organizational system counseling, and additional referrals are recommended in order for those impacted by the crisis to continue processing residual problems attributed to the crisis situation. Although Morrison (2007) found that school personnel reported high ratings for utilizing CISM to create a school crisis plan and for informing students about a crisis, the author found that participants reported no measurable effects of CISM interventions on student outcomes after a crisis.

The second model, *Psychological First Aid (PFA) for Schools* is intended to provide training and methods for support to all school personnel, students, families, and community members who are impacted by a crisis (Brymer et al., 2012). Lawson (n.d.) recommended that

school counselors utilize PFA in Schools to address the immediate aftermath of a school violence incident. Schreiber et al. (2006) identified key components of the PFA for students and teachers that include listen, protect, connect, model, and teach. Ramirez et al. (2013) found that the listen, protect, and connect components of PFA were effective for middle school students who were exposed to trauma. Although a small sample size of 20 participants were used in Ramirez et al.'s (2013) research, students were identified because of exposure to a traumatic or stressful experience and referred to the school nurse who administered PFA. Students experienced a decrease in depressive and posttraumatic stress symptoms, while social support and school connectedness increased.

According to the PFA for Schools model, the first step of preparedness involves providing effective training for all school personnel about different levels of a crisis, such as needs as well as short and long term effects for all involved in a crisis. Additional steps include practicing the use of an identified crisis plan, continuing to evaluate the effectiveness of the plan, and revising the plan, if needed (Brymer et al., 2012). In the PFA for Schools model, reestablishing normalcy and resuming school activity are stressed. The CISM and PFA models are both used during the prevention stages of a crisis that provide guidance in how to respond during a crisis and after a crisis has taken place (Brymer et al., 2012; Mitchell & Everly, 2010).

# **Crisis Stage Approach**

In the wake of the 1999 Columbine High School shooting, school safety and violence prevention significantly increased (Goforth, 2019). A stage approach to crises includes four stages: (a) prevention, (b) preparedness, (c) intervention and response, and (d) postvention and recovery.

## **Prevention Stage**

In the violence prevention stage, proactive steps are used to prevent school crises (Moore & Susan, 2015; NASP, 2002, 2014). As part of a prevention effort, all school personnel (i.e., teachers, principals, and school counselors) and community members should be involved and play an important role in school violence prevention. A positive school climate is critical to preventing school violence. When a positive school climate exists, a sense of safety and security among students and school personnel are experienced (Poland & Conte, n.d.). Ozer and Weinstein (2010) said that perceived school safety and open communication about violence were protective factors against the development of subsequent mental health problems of adolescents who were exposed to violence. A positive school climate promotes respect, trust, collaboration, and connectedness among students as well as school personnel (Poland & Conte, n.d.).

In a longitudinal study including 230 female and 230 male participants, Kuperminc et al. (2001) found that for middle school male and female students, internalizing (r = -.24) and externalizing (r = -.48) problems decreased when students' positive perceptions of school climate increased. Additionally, when a positive school climate exists, typically students are more receptive and able to express their concerns to school personnel before a crisis occurs. Students are more likely to speak to school personnel about peers who have been impacted by negative factors and who are in need of assistance (Fein et al., 2002; Poland & Conte, n.d.).

**District Policies.** According to the NASP (2002, 2014), the establishment of clear and direct district policies is an important aspect to prevention of a school violence crisis. Through establishing district policies prior to violence, school personnel have a defined set of procedures to adhere to in the event of an act of school violence (NASP, 2002, 2014). As recommended by the NASP (2002), policies should include information that relates to "assigning and training the

threat assessment team, evaluating and interviewing the potential offender, notifying and working with parent's, interviewing other students and staff, determining the level of intervention required, bringing in additional professionals (e.g., mental health, social services, law enforcement), providing follow-up observation and services, and responding to media should the need arise" (para. 5). When clearly defined district wide policies and procedures exist, school personnel have the knowledge and information necessary to intervene and respond in the event of a school crisis.

**School Counselors' Involvement.** In the majority of school settings, school counselors' responsibility is to offer academic, social, and behavioral support to students and counselors are essential personnel for school violence prevention. Also, school counselors are an integral part of the primary, secondary, and tertiary response to a school crisis (Studer & Salter, 2010). According to the ASCA (2019), school counselors should develop a comprehensive school counseling program that increases positive school climates, ensures efforts are made to promote school safety, and provides a safe space for students to report concerns about possible violence. Also, school counselors should implement preventative practices and policies to deter school violence through therapeutic and supportive approaches. For example, providing individual and group sessions for students that focus on emotional, social, academic, career, and psychoeducation topics (ASCA, 2019; International Association of Chiefs of Police [IACP], 2009). School violence preventative assessments used in conjunction with existing threat assessment procedures can assist school counselors in identifying contributors to violence and connect students who are in need to school-based services and, if needed, community-based counseling services.

In the *Mass Attacks in Public Spaces*–2018 report, the National Threat Assessment Center (NTAC, 2020) examined violent attacks between 2017 and 2018 that included 27 offenders, in which 93% were male ranging in ages 15 to 64. Of the offenders, 67% displayed symptomology characteristic of a mental health disorder, such as depression, psychosis (i.e., paranoia), and suicidal thoughts. Also, offenders displayed additional behaviors indicative of emotional distress (e.g., difficulty coping with stressors, anger, and isolation).

Regular access to school counseling services can increase student empowerment, promote positive school climate, and contribute to a supportive academic and social environment (Rossen & Cowen, 2014). School counselors can proactively target underlying mental health problems by offering individual or group counseling sessions for students, facilitate conflict resolution between peers or other school personnel, and increase positive communication with parents, peers, and school personnel (ASCA, 2019; Garran & Rasmussen, 2014). An important aspect of a school counselor's role is advocacy. School counselors have the professional and ethical responsibility to advocate for effective identification and implementation of school violence prevention measures that increase school safety. School counselors should serve as advocates for students and school personnel to promote a positive and safe school environment (ASCA, 2019). Additionally, school counselors' roles are to advocate for consistent implementation and development of policies that address student safety and provide training to school personnel and students of crisis prevention practices (ASCA, 2019; Garran & Rasmussen, 2014). Additional advocacy roles of school counselors are supporting student organizations that are intended to deter school violence in a school environment and ensure that community resources are available when needed.

School Personnels' Involvement. School personnel (i.e., teachers, principals, school counselors, etc.) also have an essential role in preventing school violence. However, research indicated that administrative efforts to address school violence and promote school safety vary (i.e., lacking a consistent implementation of preventative practices). School personnel should be aware of warning signs and symptoms of school violence that provides an opportunity for early intervention by school personnel. School personnel can identify warning signs of student violence by observing students' engagement with peers and others, noticing any emotional or behavioral changes in students, and recognizing expressions of extreme beliefs of students. Early intervention requires that school systems have effective threat assessment teams and assessment measures to evaluate student communications and changes in students' behaviors that can result in threats (Reeves & Brock, 2017). Without identified protocols and policies to assess threats by students, warning signs exhibited by students may be discounted, ignored, missed, or not followed up on (Goodrum & Woodward, 2016; Reeves & Brock, 2017; Safe Havens International, 2016). Informative trainings and effective assessments for school personnel are essential to identifying, addressing, and preventing acts of school violence.

In the hope of decreasing school violence, many school principals have a supportive approach to improving school environments (Collier et al., 2018). However, efforts to implement a supportive approach to school safety have proven to be difficult when principals attempt to balance support versus punitive actions. In a qualitative analysis that examined school administrators' and safety officers' perspectives on school safety practices and policies, Collier et al. (2018) found that school administrators and safety officers prioritize supportive efforts over punitive actions. During instances of extreme misbehavior (i.e., bring a weapon to school or

aggression), school administrators reported they utilized supportive strategies to help students who were aggressive, while they balanced the need to protect the majority of students.

Besides school principals, teachers are also essential to school violence prevention due to their consistent interaction and familiarity with students and their ability to notice significant changes in students' behaviors (Cornell, 2020). A close bond between students and teachers serves as a protective factor against violence (Hirschi, 1969). Hirschi (1969) theorized that adolescents are less likely to engage in violence if they are concerned with the opinions and perceptions of school employees, such as teachers.

Students' Involvement. Student involvement in a school safety plan and positive extracurricular activities are preventative methods against school violence (Clark, 2011; Hirschi, 1969; Poland & Conte, n.d.). According to Hirschi's (1969) SCT, students' connection to their school and participation in positive activities decreases the likelihood of students acting violently. Students' involvement in positive extracurricular activities increases positive interactions with peers and school personnel (Clark, 2011). Also, student involvement in positive activities serves as a protective factor against school violence. Examples of student involvement that can prevent school violence and increase positive interactions with peers are: (a) creating a student task force, (b) mentoring or reporting peers who need help, (c) developing student clubs that address school safety and violence prevention, (Carter et al., 2019; Poland & Conte, n.d.), (d) joining a structured leisure activity, such as sports (Clark, 2011), and (e) creating events that involve community members (e.g., neighbors, first responders) and parents (Clark, 2011; Poland & Conte, n.d.). Vossekuil et al. (2002) found that school shooters communicated to their peers plans for violence 93% of the time prior to an incident, which indicates that students can serve as a preventative role against school violence when they report peers who need assistance.

According to Hirschi's (1969) SCT, a student's commitment to academic and career goals serves as a protective and preventative factor against a student engaging in negative or delinquent behaviors. As students become more committed to their academic or career goals, they are less likely to engage in any negative behaviors that will jeopardize their goals and future (Hirschi, 1969). Middle school has been identified as the most beneficial time to introduce students to career exploration and connection to long term goals (Association for Career and Technical Education [ACTE], 2017). School personnel have the opportunity to increase middle school students' exposure, connection, and awareness to available career options, while personnel facilitate and reinforce students' future goals (ACTE, 2017). Thus, school personnel can prevent any disconnect with students' commitment bond, a component that can contribute to delinquency (Hirschi, 1969).

Community Involvement. Establishing connections with community support is an essential way for school counselors and personnel as well as students to prevent a crisis in a school (Schonfeld & Newgass, 2003). Proactive and positive relationships with community members (i.e., law enforcement officers, clinical mental health counselors, and social workers) can benefit schools and prevent instances of school violence. To prevent school violence, additional support from the community can involve improving the environment surrounding the school, increasing recreational programs for students, and addressing efforts to improve low socioeconomic neighborhoods (Youth.gov, n.d.).

### Preparedness Stage

A key factor in any effective crisis intervention is preparedness (Poland & Conte, n.d.). Crisis plans should not be developed during a crisis event (ASCA, 2019; Poland & Conte, n.d.). Rather, thorough knowledge of a school's crisis policies and procedures is essential before a

crisis occurs and should be a part of school personnel training (Moore & Susan, 2015). For example, developing plans for the use of threat assessments should occur prior to a crisis and should be shared with essential school personnel before a crisis happens (ASCA, 2019). In 2002, Allen et al. found that 61% of school counselors participated as a school crisis team member and 43% reported practicing school crisis plans at least once a year. Preparedness for a crisis includes training for school personnel, establishing a crisis team, and identifying assessment tools for evaluation (NASP, 2002, 2014; Rossen & Cowen, 2014).

**Training.** Effective crisis training of school personnel is a vital component of preparedness measures in schools. Knowledge and awareness of the warning signs of violence can provide an opportunity for school personnel to proactively connect students to effective assistance and counseling services that may be needed (Moore & Susan, 2015; NASP, 2002). Through effective training, school personnel can become aware of the approaches to addressing school violence (e.g., evaluation and threat assessment; NASP, 2002, 2014). According to the United States Government Accountability Office's (2020) K-12 Education Characteristics of School Shootings report, between 2009 and 2019, 49% of school shooters were current or former students. The NTAC (2020) reported the highest rate of mass attacks occurred in 2018, in which 93% of offenders exhibited concerning or threatening communications to others prior to a violent act. The report further indicated that 73% of behaviors demonstrated prior to a violent act contributed to concern in others (e.g., family, peers, school staff, coworkers, etc.). In a separate report, Silver et al. (2018) found that warning signs exhibited by all active shooters (i.e., not limited to school shooters) were mostly ignored, indicating the need for effective training of the signs and behaviors exhibited by students.

Allen et al. (2002) examined school counselors' preparation and training for school crisis intervention. Participants included 236 school counselors in which 88% had completed a master's degree. The authors found that 64% of the school counselors were exposed to some degree of crisis intervention during graduate school, with only 10.60% who reported that they had a class designated to school crisis intervention. Of the sample, 57% of school counselors reported feeling minimally or not at all prepared to address a school crisis. For professional development, 69% of the school counselors reported seeking continuing education opportunities in school crisis prevention.

## Intervention and Response Stage

Crisis intervention and response occurs after a threat of harm or act of violence has occurred. According to the *ASCA National Model* (2019), crisis response is "the immediate and follow-up intervention necessary to meet urgent needs and prevent situations from becoming more severe" (p. 148). School personnel play a key role in crisis intervention and response.

Therapeutic Intervention. A vital factor in supporting and helping students who are struggling is therapeutic support. As a key member of a multidisciplinary team and threat assessment approach, school counselors should provide therapeutic support to students and school personnel. School counselors should assess a crisis situation and provide recommendations of how to address the crisis (Poland & Conte, n.d.). School counselors play an important part in identifying a student or students who need immediate intervention and evaluation (Schonfeld & Newgass, 2003). During a school crisis, school counselors can intervene with a student who needs assistance (Brymer et al., 2012). Specifically, school counselors should address the mental health concerns of a student who is experiencing a crisis

and counselors should be equipped with the skills to de-escalate a crisis situation (Baciğlu & Kocabiyik, 2019).

Once a therapeutic intervention plan is identified, school personnel should implement initial steps to assist a student who needs help and any changes needed in the school environment. School counselors can offer support through systematic de-escalation of a crisis situation, establishing safety for students, offering individual therapeutic sessions, and connecting students to community counseling services (Baciğlu & Kocabiyik, 2019). The use of crisis evaluations can assist in identifying the immediate needs and goals of a student that can often result in referrals for further therapeutic assistance (Schonfeld & Newgass, 2003). Additionally, Lawson (n.d.) noted that school counselors' familiarity with students and school personnel enables school counselors to support individual and community needs in the immediate and aftermath of a crisis.

## Postvention and Recovery Stage

The aftermath of a school crisis has a tremendous impact on all school personnel as well as all students (Schonfeld & Newgass, 2003). Postvention follow up is critical when addressing the immediate and long term needs and reactions of school personnel and students (Schonfeld & Newgass, 2003).

Counseling Services. Following a school crisis, mental health services are crucial in providing support during the short and long term needs of school personnel and students (Studer & Salter, 2010). However, recovery from a school crisis is an ongoing process (National Education Association [NEA], 2018). Crises can often increase or trigger preexisting mental health problems that can add to what school personnel and students are handling after a crisis (Studer & Salter, 2010). While school counselors can provide services during the recovery

period, community-based crisis counselors are trained to address the immediate mental, emotional, and psychological needs of individuals following a crisis (NEA, 2018; Schonfeld & Newgass, 2003). Community-based crisis counselors are professionals who should provide the mental health counseling services to personnel and students immediately after a crisis (Schonfeld & Newgass, 2003). A recommendation for school personnel, especially the school's multidisciplinary threat assessment team members, is to seek counseling services to address their own trauma or foreseeable effects of a school crisis (e.g., flashbacks to the incident, nightmares or sleep pattern disturbances, and increased symptoms of anxiety or depression; NEA, 2018).

Although community-based crisis counselors are recommended after a school crisis, school counselors can also provide support to school personnel and students (Studer & Salter, 2010). In the aftermath of a crisis, continuous support and crisis postvention can assist a student who needed help and other students who are impacted in a school system. School counselors can provide counseling services as part of the continued efforts to regain normalcy and routine in schools (NEA, 2018; Studer & Salter, 2010). Once everyone returns to a school after a crisis, school counselors and personnel should provide a supportive and empathic environment so that students continuously connect with others and communicate their needs (Studer & Salter, 2010). Also, school counselors can provide continued connection to community referrals, classroom lessons with teachers, as well as group and individual counseling that is needed to create a safe space for students who need assistance. In a qualitive analysis by Brown (2018), with three school counselors, a principal, a teacher, a bus driver, a parent, and a student, the author indicated that stronger relationships between the school and community counselors would have been beneficial.

An identifiable crisis plan is a key element for preparing, intervening, and recovering from a school crisis (ASCA, 2019; Rossen & Cowen, 2014). However, many approaches and different views from divergent disciplines regarding adolescent violence that can occur in schools is available, which creates variance in how school personnel develop their school's crisis plan (Brymer et al., 2012; Cornell, 2020; Goodman-Scott et al., 2019; Mitchell & Everly, 2010; O'Toole, 2000). Factors, such as understanding adolescent development and potential negative factors that impact their development, should be a part of the framework in a school's crisis plan. Therefore, a collaborative definition and understanding on adolescent violence and the escalation to school violence is necessary.

## **Adolescent Development and Violence**

Divergent disciplines (i.e., counseling, psychology, criminology, and sociology) have varying views regarding adolescent development and violence. Their views are similar; however, they lack a cross field synopsis for defining adolescent school violence (Mayer & Jimerson, 2019). In SCT, a basic theoretical view of humans is that free will comes with choices and responsibilities and the consequences of the choices made (Espelage & Hong, 2019; Kempf-Leonard & Morris, 2017). During human development, social conformity occurs as individuals, such as adolescents learn to abide by social rules (Espelage & Hong, 2019; Hirschi, 1969). Adolescents' poor choices can result in violence and criminal behaviors (Espelage & Hong, 2019; Hirschi, 1969). Hirschi, an important figure from two interdisciplinary fields, criminology and sociology believed that adolescents are able to exhibit strong social bonds based on their development of attachment to others, commitment, and involvement with prosocial activities as well as their beliefs about societal norms (Espelage & Hong, 2019). Hirschi (1969) asserted that when adolescents' attachment to others, commitment to conventional goals, involvement in

conventional activities, and belief in conventional norms are weak and do not develop or do not exist; adolescents tend to exhibit violent behaviors. One or more weakened bonds in any of the four components increases the probability of adolescent delinquent or violent behaviors.

Whereas, adolescents' attachment to others, choices to be involved in productive activities, their commitment to goals, and beliefs in conventional norms act as protective factors against violent behaviors (Cretacci et al., 2018).

Similar to SCT, cognitive behavioral theorists suggested that individuals, like adolescents can have maladaptive or productive thoughts that directly influence their emotions and behaviors (Don et al., 2019; King & Boswell, 2019). Their maladaptive or distorted beliefs are reinforced through negative self-talk that creates distress for adolescents (Beck, 1970; Don et al., 2019; Geschwind et al., 2019). Cognitive behavioral theorists believe that individuals, such as adolescents have the ability to positively change their behaviors and behavioral patterns (Beck, 1970, 1976, 2011; King & Boswell, 2019).

In both, SCT and CBT, thoughts and emotions as well as the potential positive or negative outcome behaviors are important. And, both SCT and CBT theorists believe that positive productive behaviors are beneficial and negative destructive behaviors are not. In CBT, the underlying mechanisms (i.e., negative feelings and thoughts) contribute to internalizing problems resulting in negative externalizing behaviors (Beck, 2011; King & Boswell, 2019; Peterson & Dutton, 2019; Zahn-Waxler et al., 2000). Adolescent pathways to school violence are reinforced through the detachment of one of more social bonds, in addition to the existence of extreme beliefs impacting their emotional state and resulting in externalizing behaviors.

## **Internalizing Problems**

A major consideration in adolescent development is their emotional regulation that can result in positive as well as negative social experiences. Persistent negative experiences combined with difficulty in coping with stressors can lead to adolescents' internalization of emotional distress, as well as negative belief systems and internalizing problems that can lead to violence. Internalization of emotional distress is referred to as any emotional state or mood caused by the inability or difficulty in managing negative emotional regulation (Peterson & Dutton, 2019; Terzian et al., 2011).

According to Benzi et al. (2018), internalizing problems are a common occurrence with adolescents. Among counseling and psychology fields, the term internalizing is frequently used as an overarching term in assessments to categorize a variety of symptoms or disorders, usually presenting in children and adolescents (Willner et al., 2016). Internalizing problems are defined as "a core disturbance in intropunitive emotions and moods (e.g., sorrow, guilt, fear, and worry)" (Zahn-Waxler et al., 2000, p. 443). For example, anxiety and obsessive compulsive disorder are viewed as internalizing disorders (Turygin et al., 2013). For internalizing disorders, adolescents experience symptoms such as anxiety, depression, psychosomatic symptoms (i.e., headaches or stomachaches), and suicidal ideation (Liu et al., 2011; Pine et al., 1998). In school violence, students' emotional well-being is often impacted by a combination of multiple and significant stressors. Signs and symptoms of internalizing problems can vary in students. In A Study of the Pre-Attack Behaviors of Active Shooters in the United States Between 2000 and 2013, Silver et al. (2018) of the FBI and criminology field described negative stressors as "... psychological, or social forces that place real or perceived demands/pressures on an individual and which may cause psychological and or physical distress" (p. 15).

#### Mental Health Stressors

Mental health stressors play a key role in the signs and symptoms of internalizing problems of potential offenders (Bonanno & Levenson, 2014; Silver et al., 2018; Vossekuil et al., 2002). According to Silver et al. (2018) from the FBI and Vossekuil et al. (2002) from the United States Secret Service and the United States Department of Education, mental health stressors are precipitated issues that can contribute to violent behaviors. Silver et al. (2018) identified mental health concerns as a predominate stressor for active shooters (i.e., not limited to school shooters). Students' feelings like nervousness as well as negative thoughts like low or critical self-esteem contribute to their emotional distress (Geschwind et al., 2019; Terzian et al., 2011). Identified psychiatric diagnoses and stressors that are associated with internalizing problems include depression, anxiety, suicidal ideation, and paranoia (Benzi et al., 2018; Don et al., 2019; Malecki et al., 2015; Silver et al., 2018). In more severe cases, intensified feelings of internalizing problems can lead to a deeper level of psychological distress that can contribute to student violence (Don et al., 2019; Terzian et al., 2011).

Silver et al. (2018) differentiated mental health stressors (i.e., finances, employment, interpersonal conflict with peers, and marital issues) from mental health diagnoses (i.e., mood, anxiety, and psychotic disorders) with 16 active shooter (i.e., not limited to school shooters) cases in the United States ranging in ages from 12 to 88, in which 63% were White, 16% Black/African American, 10% Asian, 6% Latino, 3% Middle Eastern, and 2% Native American. Of the 16 shooters, 94% were male and 6% were females (Silver et al., 2018). Whereas, in an earlier study by Vossekuil et al. (2002), the *Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*, only 17% of attackers ranging in age from 11 to 21 were diagnosed with some type of mental health or

behavioral disorder. The predominate ages were between 13 and 18, in which 76% were White, 12% African American, 5% Latino, 2% Native Alaskan, 2% Native American, and 2% Asian. Additionally, Malecki et al. (2015) and Terzian et al. (2011) reviewed research on school violence offenders who reported experiencing extreme depression.

## Personality Traits

Personality traits can be another indicator of adolescents' mental health and emotional distress. Benzi et al. (2018) found that personality traits (i.e., negative affect, detachment, antagonism, disinhibition, and psychoticism) were related to psychological distress (i.e., anxiety, depression, withdrawn, grandiosity, impulsivity, and delusions). Participants in their study ranged in ages 13 to 19, in which 351 were females and 211 were males. Significant findings included positive correlations between all maladaptive traits and psychological distress (r = .22 - .64). Additionally, significant findings for participants' maladaptive personality traits (i.e., negative affect  $\beta = .37$ , p < .001, and detachment  $\beta = .23$ , p < .001) and psychoticism ( $\beta = .31$ , p < .001) predicted psychological distress ( $\beta = .59$ ).

### Suicidal Ideation

Suicidal ideation is particularly pervasive among adolescents who experience internalizing problems (Bonanno & Levenson, 2014; Lankford, 2012; Malecki et al., 2015; Terzian et al., 2011; Vossekuil et al., 2002; Zahn-Waxler et al., 2000). In 2017, Heron (2019) reported that individuals who were 10 to 24 years old and completed suicide accounted for 19.20% of the leading causes of death in the United States. Suicidal ideation can be direct (e.g., expressed plan, intent, or means) or indirect (e.g., expressed hopelessness or self-destructive behaviors; NIMH, 2019). Specifically, adolescents who are 12 to 18 years old are at a higher risk of suicidal ideation when compared to other developmental ages of children (Massing-Schaffer

et al., 2019). According to Silver et al. (2018) of the FBI, 48% of active shooters (i.e., not limited to school shooters) experienced suicidal ideation. Vossekuil et al. (2002) reported that 78% of school violence offenders experienced suicidal ideation or behaviors connected to suicidal ideation (e.g., planning or preparation) prior to an act of school violence.

Specific to gender, female adolescents' experiences of interpersonal stressful life events were related to their increased possibility of suicidal ideation (r = .17) and suicidal ideation and depressive symptoms were related (r = .38; Massing-Schaffer et al., 2019). Also, peer rejection was related to female adolescent suicidal ideations (r = .18). However, previous suicidal ideation (r = .37) and depressive symptomology (r = .36) had a stronger relationship with subsequent suicidal ideation than interpersonal peer issues (r = .20). Additional factors that can contribute to suicidal ideation include familial dynamic issues, problems in school, social marginalization, and personal crises (Bonanno & Levenson, 2014; Geschwind et al., 2019; Lankford, 2012).

### **Extreme Beliefs**

A second major consideration in identity development is adolescent experimentation with different identities or beliefs (Geeraerts, 2012). Adolescents' emerging and developing beliefs contribute to the formation of their belief systems. According to Hirschi's (1969) SCT, in an individual's belief system, beliefs can occur that are slanted or opposite to the collective societal norms, which can result in an individual's violent behaviors. Extreme beliefs are defined as the "profound convictions opposed to the fundamental values of society, the laws of democracy and the universal human rights, advocating the supremacy of a certain group (racial, religious, political, economic, social, etc.)" (Trip et al., 2019, p. 1). Negative outcomes, such as violent acts are often the result of extreme beliefs (Borum, 2011; Meloy & O'Toole, 2011; O'Toole, 2000; Silver et al., 2018; Trip et al., 2019). When adolescents have "a change in beliefs, feelings, and

behaviors in directions that increasingly justify intergroup violence and demand sacrifice in defending the ingroup" radicalization occurs (McCauley & Moskalenko, 2008, p. 416).

Radicalization is an outcome of extreme beliefs (Borum, 2011). In schools, students may have extreme and radicalized beliefs about their parents, school personnel, and even peers. Students' expression of extreme and radicalized beliefs (i.e., threats to school or others) increase the potential for negative actions by students that result in school violence. Also, students' extreme beliefs can result in radicalization (i.e., a significant or extreme change in beliefs) and primary grievances (i.e., perceived trigger to violent behavior).

In order to understand an adolescent's process of radicalization, it important to understand the impact of a student's extreme beliefs as related to school violence. Although a singular pathway to radicalization and violence does not exist, extreme beliefs and ideologies can contribute to the pathway to school violence (United Nations Educational, Scientific and Cultural Organization, [UNESCO], 2017). The term extreme beliefs is commonly used throughout interdisciplinary fields of psychology and criminology to describe any attitudes or ideologies that deviate from the collective norm (Trip et al., 2019). A student's beliefs are a key component to evaluating the potential for violence. Extreme beliefs and ideologies are a precursor to the development of radicalization (Borum, 2011; Trip et al., 2019).

#### Radicalization Process

Research on radicalization and extremism increased following the 9/11 attacks that has focused on the escalation of extreme beliefs and radicalization, which were a precursor to the terrorist attacks (McCauley & Moskalenko, 2017). In more recent society, radicalization and extremism can been seen in groups, such as the Proud Boys who support extreme beliefs (i.e., justifying violence against others; Davies & Wu, 2021). Although the stages of radicalization are

often referred to in a political context, similar ideas can be applied in the context of adolescents' school violence and escalation of their extreme beliefs and radicalization that leads to violence.

During the first stage of radicalization, preradicalization, exposure to extreme beliefs occurs with students who have limited history of violence or behavioral problems (McCauley & Moskalenko, 2017). During the second stage, self-identification, influence of extreme beliefs, and radicalized ideologies begin where students formulate their identity that aligns with their radicalized or extreme beliefs. Technology can impact a student's extreme beliefs and resulting radicalization. Technology provides a multitude of online sites (i.e., violent content or radicalized ideologies) and platforms (i.e., opportunities to connect and have conversations with others) that contribute to a student's perpetuation of extreme beliefs and radicalized identity formation. When a student identifies with others (i.e., either peers or people via online chat platforms) who share extreme beliefs and radicalized like-minded ideologies, the indoctrination stage occurs, which is the intensification of extreme beliefs and radicalization (McCauley & Moskalenko, 2017). By aligning themselves with other like-minded individuals, students develop a sense of belonging that addresses the social or familial marginalization they may experience (Böckler & Seeger, 2013).

Additionally, connecting to individuals who share similar extreme or radicalized beliefs (e.g., school shootings) may provide a way to regain control or power for a student who may feel powerless (e.g., victim of bullying; Böckler & Seeger, 2013). A student's extreme and radicalized belief system can be reinforced and intensified when connecting to peers or groups who share similar radicalized views about violence. Also, students' identification with past offenders (e.g., Columbine shooters) can be a significant indicator of their radicalized views and that they may act violently (Meloy & O'Toole, 2011). Students, who are preoccupied and idolize

past offenders' and their violent acts, exemplify students' existing radicalized belief systems. Existing radicalized belief systems are enhanced when students plan to further past offenders' violent causes or in the rationale for their violence (Meloy & O'Toole, 2011), in which the violence becomes a form of symbolism (i.e., admiration for a past offender or in response to bullying; Malkki, 2014). Also, students' perceptions of unfairness can contribute to the development of their extreme beliefs and radicalized identity. Distorted thoughts, internal conflict between sense of self, and perceived or real embarrassment can also contribute to students' persistent thoughts to right the wrong they perceive they have experienced by committing violent acts (Silver et al., 2018; Vossekuil et al., 2002). In the final stage of radicalization, a student begins to plan and then carry out an act of school violence that serves their extreme beliefs and radicalized ideologies (McCauley & Moskalenko, 2017).

## **Triggers**

Research by two interdisciplinary fields, criminology and psychology does not support the idea that school violence offenders *just snap* (Silver et al., 2018). Rather, research has shown that precipitating triggers often lead to violent outcomes by offenders (Office of Partner Engagement, 2016). A trigger can be a primary grievance of offenders (O'Toole, 2000; Silver et al., 2018) that is in response to their skewed perceptions of unfair or inappropriate treatment (Silver et al., 2018). According to Vossekuil et al. (2002), based on the reports by the United States Secret Service and the United States Department of Education, difficulty accepting failures is a common factor among potential offenders of violence at school. Offenders' observable behaviors that are evidence of a primary grievance include aggression, outbursts of anger, and negative reactions, such as difficulty accepting failure (O'Toole, 2000; Silver et al., 2018; Vossekuil et al., 2002).

During adolescents' impressionable, identity development; exposure to extreme or radical beliefs can result in negative outcomes for adolescents and those surrounding adolescents (Geeraerts, 2012). Radicalization can occur in an individual or group basis (Trip et al., 2019). Radicalized individuals or groups uphold a grandiose sense of self and superiority. When committing violent acts, adolescents' perceived superiority of self is often a contributor of their choices. When adolescents believe they have been judged, rejected, or treated unfairly; their perceptions of themselves and their worldview can become radicalized resulting in a shift in their beliefs and worldview to a negative perspective (van den Bos, 2020). Also, their perceptions of unfairness can have a negative impact that contributes to their extreme or radicalized beliefs and resulting violent acts (van den Bos, 2020). Grievances and difficulties accepting loss or failure also serve as triggers for adolescents who commit acts of violence (Silver et al., 2018). Fives et al. (2011) indicated that male adolescent anger ( $\beta$  = .44, p < .01) and irrational beliefs (i.e., intolerance of rules;  $\beta = .18$ , p < .04) predicted subsequent physical aggression. A protective factor against adolescents' extreme and radicalized beliefs are strong ties to positive relationships and supportive bonds with family or friends (Wojcieszak, 2010).

## Lack of Coping Skills

Exposure to violence can have a negative impact on adolescents' mental health and their ability to cope that can lead to a potential for violence (DiClemente & Richards, 2019). When adolescents lack proper coping strategies to address stress or negative emotions, adolescent violence is often precipitated by a psychosocial crisis or grievance that becomes exasperated (Feidler et al., 2020). According to Feidler et al. (2020), an offenders' lack of effective coping strategies can impair their ability to respond to stressors and negative emotions (i.e., anger, despair, and revenge) and lead to inappropriate coping strategies (i.e., extreme or violent

resolutions). Additional aversive influences on adolescents can lead to poor and ineffective coping skills that can result in negative emotions and stressful situations (Barendregt et al., 2018). Adolescents' lack of coping skills can also contribute to the development of inappropriate reactions to emotional responses, impaired functioning, and psychosomatic symptoms (Barendregt et al., 2018; Orzechowska et al., 2013).

DiClemente and Richards (2019) researched the effect of coping strategies (i.e., problem focused, emotion focused, and avoidant coping techniques) on decreasing adolescent anger and aggression in high stress environments. Participants were 263 predominately Black female students from low SES urban neighborhoods. According to the authors, when coping skills were used less, aggression and delinquency increased for eighth grade females, who were exposed to violence. Although, sixth grade male students, who were exposed to violence, reported using more problem focused coping skills; however, delinquency increased when they advanced to eighth grade. Additionally, when exposed to violence, avoidant coping skills were used more commonly by sixth graders. The authors suggested that male students may need additional resources for coping. Feidler et al., (2020) cautioned that due to the lack of coping skills and the escalation of students' extreme beliefs, observable warning behaviors and expressions of violent intentions may indicate a plan to act violently.

# **Externalizing Behaviors**

A third important consideration in adolescent development is externalizing behaviors that are frequently referred to in both the counseling and psychology literature to describe a spectrum of symptoms and the term is used to described students' visible representations of distress that are externally focused (e.g., aggression, violence, and explosive tempers; Liu et al., 2011; Willner et al., 2016). Externalizing behaviors are defined as "the negative behaviors [that] tend

to be expressed outwardly and are likely to directly affect other people and society at large...behaviors that seemingly reflect less awareness of or concern for the affective consequences of one's behavior for others" (Miller & Eisenberg, 1988, p. 325). For example, attention deficit hyperactivity disorder is a type of diagnosis that is viewed as an externalizing disorder (Turygin et al., 2013). However, divergent disciplines (i.e., criminology) frequently utilize the term *concerning behaviors* to describe observable behaviors of offenders (Silver et al., 2018). Although it is developmentally appropriate for adolescents to have behavioral fluctuations such as outbursts, underlying and deeper severe mental health problems that are physical in nature, such as paranoid (e.g., mistrust and hypervigilance) and antisocial behaviors (e.g., lacking remorse, aggression, impulsiveness, and disregard for rules or right and wrong) can be an indicator of adolescents' externalizing behavioral problems (Benzi et al., 2018; Lee, 2017).

Students' externalizing behavioral changes can be caused by emotional distress, such as withdrawal, depression, and shyness (Geschwind et al., 2019; Terzian et al., 2011). Vossekuil et al. (2002) pointed out that the majority of violent attackers displayed noticeable externalized behavioral changes prior to acts of violence. Students who have excessive difficulty dealing with failures or losses (e.g., loss of status, loved one, or romantic relationships) can exhibit strong or extreme externalizing behavioral changes and reactions (i.e., conflicts with others, behavioral outbursts, aggression, verbalization of anger, and increased need for sleep; Don et al., 2019; Geschwind et al., 2019; Peterson & Dutton, 2019; Vossekuil et al., 2002). In research on 12 school shooters, Silver et al. (2018) stated that 92% of peers recognized concerning behaviors exhibited by offenders prior to any acts of violence. Also, several researchers indicated that school violence offenders exhibited changes in their behaviors that were precipitated by identifiable triggers (O'Toole, 2000; Silver et al., 2018); warning behaviors (Meloy & O'Toole,

2011); communication leakage, such as threats to others prior to violent actions (Meloy & O'Toole, 2011); suicidal behaviors (Malecki et al., 2015; Terzian et al., 2011); aggressive physical behaviors, such as having a history of conduct problems or oppositional behaviors (Benzi et al., 2018); and difficulty accepting academic or interpersonal failures (O'Toole, 2000; Vossekuil et al., 2002).

## Warning Behaviors

Identification of warning behaviors is an important and proactive step in helping students to de-stress and not commit an act of violence; thereby, preventing school violence. Student offender preparation for violence in schools can include purchasing weapons, researching ideas about violence, or practicing plans to commit violence prior to a violent event (Calhoun & Weston, 2015; Meloy & O'Toole, 2011). According to Vossekuil et al. (2002), 27% of offenders expressed interest in violent content, like violent movies, 63% of offenders were known to use weapons in the past, 68% obtained a weapon from their family environment, and 93% of offenders planned their violent act. Additionally, identifying the specific details of a violent act can be included in offenders' preparation (Office of Partner Engagement, 2016). Students who consider acts of violence are often fixated or obsessed with an intended target and often increase their contact with the intended targets prior to a planned act of violence (Meloy & O'Toole, 2011; Mullen et al., 2009). Students who threaten to commit violence often try small-scale violent behaviors prior to their planned attacks, such as creating videos exhibiting violent behaviors (Meloy & O'Toole, 2011).

## Leakage

One of the most important behavioral warning signs from students who may be violent is their alarming communication that can occur prior to their acts of violence (Borum et al., 2010; O'Toole, 2000; Vossekuil et al., 2002). Meloy and O'Toole (2011) described alarming communication as *leakage*, "...communication to a third party of an intent to cause harm to a target" (p. 514). Leakage is a term frequently used in criminology research. Students' leakage may present in different ways. For example, leakage can be seen through social media posts, written essays or documents, conversations with peers, various forms of self-expression, such as drawings or artwork, and ultimatums related to threats (Leuschner et al., 2017; Office of Partner Engagement, 2016). Vossekuil et al. (2002) stated that 37% of offenders demonstrated leakage through their writings, essays, and documents. Also, threatening language (i.e., expressing direct threats to self, others, or school) can be categorized as leakage and is considered a warning sign that a student may commit a violent act (Meloy & O'Toole, 2011).

Vossekuil et al. (2002) reported that 81% of violent incidents in schools by students were communicated to at least one other person (e.g., another student, a teacher) prior to a violent act, and 59% of school violence incidents were communicated to more than one person. In school settings, leakage is often a precipitator to violence; however, adolescents' communications that are alarming and changes in their behaviors do not always lead to violence (Leuschner et al., 2011; Leuschner et al., 2017). Leakage remains one of the most important warning signs of an impending violent act (Office of Partner Engagement, 2016). Whether threats are implicit or explicit, students' leakage can be evident in their extreme beliefs and provide insight into possible students' actions (Leuschner et al., 2017; Office of Partner Engagement, 2016).

#### Suicidal Behaviors

According to Vossekuil et al. (2002) and Meloy et al. (2014), suicidal behaviors can be one of the major concerns that are related to school violence. Externalized behavioral evidence of students' suicidal risk factors can be through past suicide attempts, self-harmful behaviors,

and distressful communications (Bonanno & Levenson, 2014; Borum et al., 2010; Lankford, 2012; Leuschner et al., 2017; Meloy & O'Toole, 2011; O'Toole, 2000; Vossekuil et al., 2002). Shaughnessy and Johnson (2019) said that depressive actions (e.g., withdrawal, isolation, changes in interests and appetite) also predict suicidal behaviors. Additionally, the authors identified external signs of students' internal struggles, such as a drop in academic performance, poor hygiene, and decrease in interests.

### **Lack of Attachment**

A fourth major consideration for adolescent violence is the lack of attachment to others. Attachment is an important aspect of adolescent development and happens in various transition periods when adolescents' attachment to parents becomes shared with attachment to peers and school (Hirschi, 1969; Moretti & Peled, 2004). Attachment to parents, peers, and school is commonly referred to in four interdisciplinary fields of counseling, psychology, criminology, and sociology research (Hirschi, 1969; O'Toole, 2000; Silver et al., 2018). Hirschi (1969) defined attachment as is "the extent to which a person [is bonded] to others" (e.g., parents, peers, and school; Hirschi, 2002, p. 19).

According to Hirschi's (1969) SCT, attachment to parents, peers, and schools is a critical factor in preventing violent behaviors. The lack of attachment to parents, peers, and school can have a negative impact on adolescents. In preventing delinquent behaviors, students' positive relationships with parents, peers, and school are a critical component in their development that serves as a protective factor to support and guide students (Hirschi, 1969; Hudson et al., 2005; O'Toole, 2000; Sommer et al., 2014). Hong et al. (2019) stated that positive communication with family, friends, parents, peers, teachers, as well as the school climate are protective factors against instances of weapon carrying for students who were bullied. However, students'

relationships with parents, peers, and school that are inherently negative directly impact students' worldview and approach to life (Hirschi, 1969; O'Toole, 2000; Sommer et al., 2014). Hirschi (1969) said that the lack of quality in students' relationship dynamics and social bonds with others plays a key role in their development of aggression and violent behaviors.

#### Parent Attachment

The quality of adolescents' attachment and bond to their parents serve as either a protective or a risk factor. According to Hirschi (1969) and Hudson et al. (2005), adolescent attachment to parents is a critical factor in delinquency prevention. Hirschi (1969) identified certain attachment factors as parental supervision, emotional communication, and observable affection. Vossekuil et al. (2002) identified differences in familial dynamics of students who are offenders, with 63% of offenders living in two parent households, 19% were from households with one biological parent, 2% were living separated between two biological parents' households, and 5% were living in foster homes.

Secure parental attachment was shown to increase emotional regulation, social competence, and academic success (Bergin & Bergin, 2009). Li et al. (2019) said that parental attachment was important for student development and prevention of aversive outcomes.

According to Youngstorm et al. (2003), family support was a main protective factor against the development of adolescents subsequent externalizing behavioral problems. Also, Bacchini and Esposito (2020) proposed that parental monitoring significantly decreased adolescents' aversive psychological outcomes (i.e., antisocial behavior, anxiety, and depression) in high risk or violent communities due to parents' consistent involvement in their children's lives. According to Frey et al. (2009), parent control and supervision decrease adolescent violent behaviors and subsequently increase their academic motivation. Adolescents with secure attachment with

parents exhibit increased emotional regulation, social competency, and positive peer relationships (Kokkinos et al., 2019).

Adolescents' lack of attachment to parents or a negative parent child relationship contributes negatively to adolescent violence (Gerald et al., 2016; Laible et al., 2000; McAdams et al., 2011). Kokkinos et al. (2019) found a low negative correlation between proactive relational aggression of adolescents and dependency on mothers (r = -.10), as well as a mild negative correlation between reactive relational aggression of adolescents and dependency on father (r = -.08). Additionally, Brodie et al. (2019) conducted a study on attachment and anger regulation with a sample of 270 participants ranging in ages 18 to 63 years old, in which 80.70% of participants were female and over half were current students (56.50%). The authors found that adults' insecure attachment anxiety with parents had a low and positive correlation with their physical aggression (r = .13) and a moderate and positive relationship with their hostility (r = .13).48). Laird et al. (2003) found that adolescent antisocial behaviors increased when a negative parent-child relationship (i.e., lack of quality time and less enjoyable relationship) existed (r = -.13). Additionally, O'Toole (2000) of the FBI said that negative factors related to family dynamics include volatile relationships between parents and children, lack of familial closeness, tolerance for pathological behaviors with families, intimidation of children from parents, and acceptance of problematic behaviors of children.

#### Peer Attachment

Students can experience successes and difficulties when establishing healthy, trustworthy, and positive relationships with peers (Hirschi, 1969; McGloin & Thomas, 2019). During adolescent development, peer involvement is a critical influence that can either contribute to or prevent adolescent violent behaviors (Hirschi, 1969). Also, peer influence can

have a positive or negative impact on adolescent decision-making and engagement in beneficial or dangerous behaviors (Leuschner et al., 2017; McGloin & Thomas, 2019; Sommer et al., 2014; O'Toole, 2000). According to Hirschi's (1969) SCT, interactions with peers that are negative can impact adolescents' attachment with others, involvement in activities, commitment to goals, and their belief systems. During adolescence, peer influence and connections with others become an essential part in adolescent development and environment (Álvarez-García et al., 2019).

In the last several years, bullying in schools has increased significantly and plays a role in the development of students' internalizing problems and their resulting externalizing behaviors (Harlow & Roberts, 2010; Juvonen & Graham, 2014). According to the *Indicators of School* Crime and Safety (2019) report, bullying in private schools is 72% higher when compared to 55% in public schools. Additionally, they reported a 27% higher rating of bullying for female students when compared to 17% of male students. Roughly, 30% of adolescents reported being victimized by bullying (Salmivalli & Peets, 2018). Vossekuil et al. (2002) found that 71% of violent offenders had a history of being a victim of bullying themselves and, in some cases, the bullying they experienced was severe and long term. In students' environment, negative peer influence can have an effect on the development of adolescents' extreme beliefs, antisocial personality traits, and the likelihood of adolescents committing violence (Álvarez-García et al., 2019). According to Álvarez-García et al. (2019), antisocial friendships have a moderate effect on an adolescent's overall antisocial behaviors. As students' radical and extreme beliefs increase, validation of their extreme beliefs is often sought from other like-minded individuals (e.g., negative peer influence).

Hong et al. (2019) found a positive and low correlation (r = .15) between weapon carrying and peer victimization. Additionally, adolescent weapon carrying had a low and

negative correlation with communication with friends (r = -.10) and significant peer relationships (r = -.07). The authors identified peer social support as beneficial in helping adolescents cope with stressors, increase their self-esteem, and experience connectedness (Hong et al., 2019). Positive peer influence prevents engagement in criminal behaviors, whereas negative peer influence contributes to an increase in delinquent behaviors (Costello, 2010; Hirschi, 1969; Sommer et al., 2014).

McCoy et al. (2019) indicated that adolescent males were more susceptible to negative peer influences when compared to females. According to Palomares-Ruiz et al. (2018), peer relationships are important and peer victimization by female and male adolescents was the initial phase to peer rejection. Peer victimization can lead to increased feelings of isolation and anxiety (Rosen et al., 2013; Storch et al., 2003), as well as low self-esteem and depression (Brunstein-Klomek et al., 2007; Rosen et al., 2013). In comparison to females, male adolescents exhibited increased externalization of problems and higher rates of peer rejection (Sentse et al., 2010). Conversely to Sentse et al. (2010), in a long-term comparative study, Jenchura et al. (2017) identified peer rejection as having a significantly greater impact on female adolescents when compared to males. Also, females who experienced peer rejection in seventh grade showed significant negative internalization problems once they reached 10th grade. Also, the amount of family support that seventh grade males had was a long-term benefit in preventing their development of internalization problems during 10th grade; however, family support for seventh grade females was not a benefit for preventing their internalization of issues in the 10th grade.

Additionally, Palomares-Ruiz et al. (2018) found that peer victimization had a mild positive correlation with students' lack of social support (r = .30) and a moderate positive correlation with peer rejection (r = .41). A mild positive correlation was found between peer

rejection and lack of social support for students (r = .21). Withdrawal was shown to predict increased levels of depression in students ( $\beta$  = .43, p < .001). According to Bonanno and Levenson (2014), students' constant isolation from interpersonal connections, such as with peers can serve as a sign of internal struggles they experience. In a longitudinal correlational study between parent-adolescent interactions and peer concerns for middle school students, Dickson et al. (2019) found positive correlations between derisive parenting and adolescents' difficulties regulating anger (e.g., aggression, negative affect, or hostility) in seventh grade (r = .35), eighth grade (r = .30), and ninth grade (r = .31). Additionally, a mild positive correlation was found between a negative parent-child relationship and subsequent bullying problems in seventh grade (r = .25), eighth grade (r = .32), and ninth grade (r = .23).

Also, bullying in schools has long-term negative effects on students' psychosocial development that can lead to continuing mental health concerns and psychiatric disorders (Copeland et al., 2013; Juvonen & Graham, 2014; Sommer et al., 2014). Palomares-Ruiz et al. (2018) reported that bullying in school systems leads to higher incidents of peer rejection, isolation, and lack of social support for students, which contributed to their emotional distress. Victimization of bullying impacts students' emotionally, cognitively, and socially as well as contributing to their internalizing problems and externalizing behaviors (Juvonen & Graham, 2014; Malecki et al., 2015). Victimization of bullying can lead to depression, anxiety, and psychosomatic symptoms as well as academic and externalized behavioral problems (Dickson et al., 2019; Juvonen & Graham, 2014).

Students' preoccupations with violent thoughts combined with negative peer influence create the likelihood of student violence and engagement in risky or violent behaviors (Hirschi, 1969; Langman, 2009; O'Toole, 2000). According to Tomé et al. (2012), interpersonal

relationships play a key role for adolescents, such that, their risky behaviors can increase when they had a greater number of friends engaged in risky behaviors; whereas, if friends did not engage in risky behaviors, a protective factor existed against students' risky behaviors.

Additionally, students' existing extreme beliefs can be reinforced by negative influences and shared radicalized ideologies of peers (Hirschi, 1969; Langman, 2009; Sommer et al., 2014; Trip et al., 2019). Prinstein and Dodge (2008) identified negative peer dynamics as a primary predictor of an adolescent's engagement in aggressive or risky behaviors. For middle school aged students, victimization by peers is common during their developmental period as increasing focus and attention are placed on peers (Rosen et al., 2013). According to Mrug et al. (2012), peer influence also plays a role in the development of externalizing behaviors.

### School Attachment

According to Hirschi (1969), students' attachment to school is an adolescent's "academic competence," [positive] "attitudes toward school," and "concern for opinion of teachers" (Hirschi, 2002, pp. 111, 129, 132). Positive attachment to school and classroom settings provides students with a sense of security and allows for positive socialization with peers (Bergin & Bergin, 2009). School climate serves as a protective factor for students' overall emotional wellbeing that contributes to their positive behavioral and social outcomes (Lester & Cross, 2015; Varela et al., 2019). Also, students' positive connection with their school environment promotes their feelings of safety and decreases the likelihood of students committing violence (Espelage & Hong, 2019).

According to Frey et al. (2009), when adolescent attachment to school existed, violent behaviors and aggressive beliefs of adolescents decreased. Exposure to violence in schools has been shown to negatively impact the climate in schools while increasing adolescent delinquency.

According to Janosz et al. (2008), exposure to school violence predicted the development of adolescent externalizing behaviors. Also, the relationship between students and school personnel is important, as a large portion of adolescents' time is spent at school (Hong et al., 2019). Positive relationships with school personnel and school environments serve as a protective factor against aversive psychological outcomes and are beneficial to students' emotional, social, and mental health functioning (Lester & Cross, 2015; Varela et al., 2019). More specifically, positive teacher and student relationships promote a positive school climate and contribute to students' overall well-being (Varela et al., 2019). For example, Frey et al. (2009) reported that positive relationships and support from teachers were associated with a positive school climate and students increased in academic motivation. According to Espelage and Hong (2019), when a positive school climate exists, students are more likely to seek help from school personnel when students are bullied, have personal issues, and are exposed to violence. Further, Lee and Song (2012) found that when a positive school climate exists, bullying behaviors decreased (r = -.12). Whereas, when a negative school climate existed the potential of bullying and instances of violence increased, which impacted the connection between students and their school (Espelage & Hong, 2019; Lee & Song, 2012).

The likelihood of violence increases when students do not consider the opinions of school personnel important and when students feel unattached from their school environment (Hirschi, 1969). A negative school climate impacts students' overall relationship with their academic environment and creates a lack of concern for consequences after an act of violence is committed. According to the *Indicators of School Crime and Safety* (2019) report, female students, ages 12 to 18 had higher rates of concern or fear of an attack or being harmed at school when compared to male students. Additionally, when compared to students at suburban schools,

students in urban schools reported having higher rates of concern, fearing attacks more, or being harmed at school. Similarly, Livingston et al. (2019) found that rural and suburban school systems (relative risk [RR] = 3.74, 95% CI [1.82, 7.67]) with a predominately White student population (RR = 1.85, 95% CI [1.19, 2.88]) have a greater number and more severe school shootings when compared to schools with different demographics. In a longitudinal study analyzing social bonds with parents, peers, and schools; Huijsmans et al. (2019) indicated that adolescent delinquent behaviors decreased when students were committed to school and had parental support. Additionally, when students' commitment to school remained stable throughout their adolescence, delinquent behaviors decreased.

## **Adolescent Exposure to Violence**

In addition to the four major factors of internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment that can impact adolescents; two contributing factors of adolescent violence and exposure to violence are low socioeconomic status (SES; Blair & Raver, 2012; Like & Cobbina, 2018; Perez et al., 2018) and environment (Chang et al., 2019; Estrada-Marinez et al., 2012; Like & Cobbina, 2018).

#### **Low Socioeconomic Status**

Low SES is a pervasive problem throughout the United States that can contribute to students' internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment (Blair & River, 2012; Peterson & Dutton, 2019). Violent incidents that impact families have increased from 32% to 48% for lowest income households of less than \$25,000 (Morgan & Oudekerk, 2019). From 2017 to 2018, when simple assault in lower SES household reports were omitted, rates of victimization of individuals 12 years and older had also increased from 12.60%

to 19%. Also, when omitting simple assault, an increase from 7.70% to 9.60% of victimizations against females 12 years and older were found.

In lower income neighborhoods and households that are exposed to higher levels of violence, an additional negative impact on students and their families occurs (Like & Cobbina, 2018; Melendez et al., 2016; Morgan & Oudekerk, 2019; Perez et al., 2018; Watson & McLanahan, 2011). Blair and River (2012) highlighted the aversive effects of SES on students' overall mental health, including the negative influence SES has on their academic performance and psychosocial development. Also, the authors emphasized the vicarious effects students experience because of their parents who can also be experiencing emotional distress, anger, depression, and negative behaviors that are linked to their family's low SES.

#### **Environment**

Environmental exposure to violence; such as communities with crime, gangs and homelessness as well as frequent family moves can be unsafe, unpredictable, and unstable for adolescents (Chang et al., 2019). Also, negative environmental influences increase the chance for adolescent aggression and social deviance (Chang et al., 2019; Doom et al., 2016; Simpson et al., 2012; Zuo et al., 2018). More specifically, Estrada-Marinez et al. (2012) found that African American adolescents who were exposed to high levels of environmental stressors (e.g., daily stress  $\beta = .32$ , p < .001, financial problems  $\beta = .07$ , p < .001, community stress  $\beta = .09$ , p < .001, and racial discrimination  $\beta = .08$ , p < .001) were at an increased chance of developing mental health problems (e.g., depression). Additionally, the authors found that African American adolescents who were exposed to high levels of environmental stressors (e.g., daily stress  $\beta = .01$ , p < .001 and racial discrimination  $\beta = .007$ , p < .001) were shown to have an increased chance of violent behaviors. Negative environments that include crime, substance use, and

violence can also increase adolescents' perceptions of a lack of safety and increase their drive for survival (Chang et al., 2019). Exposure to environmental violence was shown to contribute to both male and female adolescents' internalizing and externalizing problems (Mrug & Windle, 2010; Youngstrom et al., 2003). One method of assessing environmental influences on adolescent violence is Hastings (1997) Screen for Adolescent Violence Exposure (SAVE) to violence at school, home, and community settings using three factors; traumatic violence, indirect violence, and interpersonal aggression.

For underserved minority populations, intersectionality of various cultural groups (i.e., low SES, unemployment, racial backgrounds, and family dynamic issues) creates a unique culture that can be a means for adolescents to choose negative survival behaviors like engaging in violent and criminal behaviors (Like & Cobbina, 2018). Like and Cobbina (2018) suggested that in response to low SES status and environmental violence, people create an oppositional culture that deviates from the norm and lacks acceptance of societal norms. For adolescents in particular, the creation of an oppositional culture and disregard for societal norms can impact the development of their extreme beliefs.

In comparative research, Asian American females had higher rates of developing internalizing problems after exposure to violence; whereas, African American adolescent males experienced overall higher rates of violent experiences (Chen, 2018). Mrug and Windle (2010) found mild positive correlations between exposure to violence at school with adolescent anxiety (r = .18) and depression (r = .13); whereas, exposure to violence at home was mildly correlated with anxiety (r = .21) and aggression (r = .22). Additionally, the authors found mild correlations between exposure to community violence and adolescent delinquency (r = .14). Similar to Mrug and Windle (2010), Ozer and Weinstein (2010) found a mild positive correlation between

adolescents who were exposed to violence and their increased Post Traumatic Stress Disorder (PTSD; r = .29) and depression (r = .15).

#### **Assessment of School Violence**

Assessment and evaluation of students who need assistance to decrease violence is one method of addressing the concern of school violence. More and more, various types of threat assessments are widely utilized throughout school systems, even mandated in states like Virginia (Cornell et al., 2017). In a statewide analysis of threat assessment implementation in Virginia, Cornell et al. (2017) found that threats of homicide (22.50%) and battery (18.20%) were most commonly assessed, with only 30.50% of threats deemed serious and 3.30% of students acted on their threat. Also, elementary school students had the highest rates of threats assessed (46.30%), followed by middle school students (30.70%), then high school (23%). The predominate targets were other students (68.20%) and faculty (14.50%). Cornell et al. (2017) stated that reasons for elementary and middle school students who communicated the most threats could be attributed to the impulsive and reckless choices that are characteristic of a particular developmental stage. Although threats of school violence should be taken seriously and explored for validity, O'Toole (2002) cautioned that all threats do not lead to violence or harm.

District policies that adhere to two main types of evaluative assessments of potential offenders include multitiered assessments and UMHS assessments. Multitiered assessments are used to evaluate a threat that has been communicated by a student in order to assess the possible threat for school violence before the violence occurs (O'Toole, 2000). Similar to O'Toole (2000), who is a prominent figure in the FBI and criminology discipline, the NTAC (2020) supported the utilization of a multitiered assessment approach that include important methods in the evaluation process of the overall level of student threat of violence. In comparison, UMHS

assessments are used in schools based on school personnel's concerns regarding students with behavioral or mental health needs. UMHS assessments are used when school personnel choose a specific assessment to address an existing problem that they are aware of, such as students in middle school exhibiting externalizing behaviors. For example, using a chosen UMHS assessment, all middle school students are screened with a year goal to reduce students' externalizing behaviors and to refer to counseling any students immediately needing further assistance. After a holiday break, a second screening is completed of all middle school students to see if the externalizing behaviors have decreased or if students need a referral to counseling.

#### **Multitiered Assessments**

When using a multitiered threat assessment, O'Toole (2000) outlined three methods for evaluating a threat that should be included. First, evaluation of a threat should include determining any "specific, plausible details" (e.g., the means and specific time, date, and location of the violence, p. 7). Evaluators should examine the rationale for a threat, any specific target, and details of the violent plan. The more detailed a plan is, the more severe a threat exists. Second, the "emotional content of the threat" (p. 8) serves as a method to evaluate the mental status of an offender who expressed a threat. When the emotional content is examined, often the degree of internalizing problems becomes evident through the alarming communications expressed by an offender (Leuschner et al., 2011; Leuschner et al., 2017; Terzian et al., 2011). Finally, "precipitating stressors" (p. 8) or the primary grievance of the negative occurrences or reactions that arise prior to the expression of the threat should be evaluated (O'Toole, 2000; Silver et al., 2018). Generally, after a primary grievance (Silver et al., 2018), an offender will engage in a preparation stage prior to the act of violence. The impact of an overall stressor

depends on the preexisting temperament and personality characteristics of an offender (O'Toole, 2000).

A commonly used and widely researched multitiered threat assessment is the Virginia Model for Student Threat Assessment (Cornell, 2007) that was developed in response to the reports of school violence by the FBI (O'Toole, 2000), United States Secret Service, and United States Department of Education (Vossekuil et al., 2002). Although the FBI typically uses a psychological profile to identify and detain offenders, the use of a profile is not recommended for school violence offenders due to the potential dangers of biases or stereotypes of students who may need help (O'Toole, 2000; Silver et al., 2018). The Virginia Model for Student Threat Assessment is a seven-step multitiered and multidisciplinary team (e.g., principals, school counselors, school psychologists, and teachers) approach to threat assessment that has been empirically validated and replicated (Cornell, 2007). Recommendations for a low level include "reprimand, parental notification, or other disciplinary action. Student may be required to make amends and attend mediation or counseling" (p. 6). Recommendations for a moderate level include "take immediate precautions to protect potential victims, including notifying intended victim and victim's parents, notify student's parents, consider contacting law enforcement, refer student for counseling, dispute mediation, or other appropriate intervention, and discipline student as appropriate to severity and chronicity of situation" (p. 6). Contacting law enforcement should be considered when a moderate level threat is made and conduct a crisis evaluation to determine the need. Finally, recommendations for substantive and very serious concerns, high level include "take immediate precautions to protect potential victims, including notifying intended victim and victim's parents, consult with law enforcement, notify student's parents, begin a mental health evaluation of the student, and discipline student as appropriate" (p. 6).

Additionally, for severe concerns, safety plan recommendations include "complete a written plan, maintain contact with the student, and revise the plan as needed" (Cornell, 2007, p. 6).

Similar to the Virginia Model for Student Threat Assessment is the Salem-Keizer Threat Assessment System (STAS) that was developed following the reports by the FBI (O'Toole, 2000), United States Secret Service, and United States Department of Education (Vossekuil et al., 2002). The STAS development was a collaborative effort among local school districts, law enforcement, and mental health agencies to allow for different professional views (Salem-Keizer School District, n.d.; Van Dreal et al., 2017). Similar to the Virginia Model for Student Threat Assessment, the STAS includes a flow chart (Salem-Keizer School District, n.d.; Van Dreal, 2011). Unique to the STAS is two levels to a screening process, including a multidisciplinary site team at the school (e.g., administrators, school counselor, teachers, and campus monitor) and, if the situation requires, a multiagency community team (e.g., school district, law enforcement, mental health agencies, Children's Protective Services, and Juvenile Justice). The level of a student's threat and plan are examined as well as the student's history of aggression or violence (Salem-Keizer School District, n.d.; Van Dreal, 2011). Additionally, the STAS includes interviews with a student as well as peers, teachers, parents, and witnesses (Salem-Keizer School District, n.d.; Van Dreal, 2011). A plan is developed to protect the target of the threat (e.g., another student or teacher) and how communication with school personnel will occur as well as procedures for families (Salem-Keizer School District, n.d.; Van Dreal, 2011).

Structured assessments can be used as an additive component to the overall threat assessment process. Copelan and Ashley (2005) developed the Adolescent and Child Urgent Threat Evaluation (ACUTE) assessment that includes 27 items to determine the risk level (i.e., low, moderate, high, severe clinical risk factors) for near-future violence among students. The

ACUTE determines the level of risk for a student's actual, attempted, or threatened harm to self or others with an internal consistency ranging from .70 to .85. Items are indicated with a yes or no answer and categorized into four domains, including threat cluster characteristics, precipitating characteristics, predisposing characteristics, and impulsivity indicators. While the ACUTE can be utilized in a variety of settings, particular to school environments, the assessment is utilized as a component to the threat assessment protocol and by threat assessment teams.

In addition to Copelan and Ashley's (2005) assessment, Schneller (2005) developed the Psychological Evaluation & Threat Risk Assessment (PETRA) that evaluates the level of risk after a student communicates a threat. The PETRA uses a 4-point Likert scale to score 60 items across four domains, including the psychological, ecological, resiliency problems, and total domain (i.e., an average of the psychological, ecological, resiliency problems domain). The PETRA assists with identifying, assessing psychosocial symptoms, intervening, and determining treatment for adolescents who need assistance. Among the 60 items, eight were identified as critical items (i.e., bullying, weapons carrying, homicidal and suicidal ideation, loss, accessibility to weapons, and abuse). Similar to the ACUTE assessment, the PETRA is also used in conjunction with established threat assessment procedures as the results assist with classifying the threat as low, medium, or high risk.

#### **Universal Mental Health Screening Assessments**

When using a UMHS assessment, school personnel screen a group of students at certain times of the school year to address a specific concern, such as externalizing behaviors (Goodman-Scott et al., 2019). An example of a UMHS tool is the Systematic Screening for Behavior Disorders (SSBD) that includes two subscales with high internal consistency (i.e., Adaptive Behavior, r = .85 - .94; Maladaptive, r = 82 - .92.; Systematic Screening for Behavior

Disorders [SSBD], n.d.; Walker et al., 2014). The SSBD is a commonly used and a well-established screening tool used with students in grades 1 through 9 to first screen and identify a target group of students who may be exhibit internalizing (e.g., shyness, fearful, spending time alone, and not participating in games) or externalizing behaviors (e.g., aggression, tantrums, hyperactivity, stealing, and not adhering to rules). Also, the target student group is observed.

Three other UMHS assessment examples are the Student Risk Screening Scale-Internalizing and Externalizing (SRSS-IE), Behavior Assessment System for Children (BASC), and Resiliency Scales for Children and Adolescents (RSCA). The second UMHS assessment is the SRSS-IE that is a commonly utilized and researched assessment to screen for middle and high school students' likelihood of developing internalizing and externalizing problems, with high internal consistency ranging in the .80s (Lane et al., 2012; Lane et al., 2016). The SRSS-IE items assess externalizing behavioral problems that include stealing, deceptive behavior, behavioral problems, peer rejection, aggressive behavior, academic decline, and negative attitude. Additionally, the SRSS-IE items for internalizing problems include peer rejection, emotionally flat, shy, sad, anxious, and lonely. Unique to the SSRS-IE is the inclusion of peer rejection in both subscales when assessing middle and high school students.

The third example is the BASC that is a commonly used screening tool to assess intrapersonal competencies based on four subscales; externalizing and internalizing problems, adaptative skills, and school problems (Reynolds & Kamphaus, 2015). The BASC has high internal consistency for the overall assessment (r > .80s) and subscales (r < .80s). The fourth UMHS example is the RSCA that screens for the level of resiliency in children and adolescents using three scales; mastery (e.g., self-efficacy and adaptivity), relatedness (e.g., trust, support, and comfort), and reactivity (e.g., sensitivity and impairment; Prince-Embury, 2006). The RSCA

is used to screen children and adolescents who may experience depression, anxiety, bullying, trauma as well as familial issues. The RSCA has high internal consistency (r = .90 - .94; Saetren et al., 2019). Although a UMHS tool is beneficial for some aspects of school counseling; for school violence situations, UMHS is not recommended because of the possibility that a student would be profiled based on risk factors and labeled as *at risk* (O'Toole, 2000; Silver et al., 2018).

#### **Assessments**

Divergent disciplines (i.e., counseling, psychology, criminology, and sociology) vary in their views regarding assessment of adolescents. However, various disciplines recognize that adolescents' internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment are specific factors that impact students who may commit violence. Several school-based assessments are available to assess the four constructs.

## **Assessment of Internalizing Problems**

Two frequently used assessments of internalizing problems are the Patient-Reported Outcomes Measurement Information System (PROMIS) and Beck Depression Inventory (BDI). The PROMIS, a self-report measure, is used to assess social, mental, and physical health of children and adults. Specific to mental health, the PROMIS is used to assess three constructs of emotional distress; anxiety, depression, and anger (Pilkonis et al., 2011). However, the PROMIS does not assess severe mental health components (i.e., paranoia or antisocial traits). The PROMIS Short Form has high internal consistency (r = .90). The BDI, the second school-based assessment, is a well-researched and commonly utilized self-report inventory that consists of 21 items that is used to assess symptoms of depression (e.g., mood, suicidal ideation, negative self-concept, withdrawal, and irritability), which overlap with signs and symptoms of internalizing problems. The BDI has medium to high internal consistency (r = .73 - .92; Beck et al., 1988).

Although the BDI is a notable assessment, the BDI specifically measures depressive symptoms, not other emotional symptomology (i.e., anxiety, paranoia, or academic decline).

#### **Assessment of Extreme Beliefs**

Four frequently used school-based assessments for extreme beliefs about violence are the Student Survey on Violence-Attitudes and Behaviors (SSV-AB), Attitude Towards Delinquency Scale (ATDS), Adolescent Coping Orientation for Problem Experiences (A-COPE), and Coping Strategy Index (CSI). The first and second school-based assessments, the SSV-AB and ATDS are used to assess adolescents' attitudes towards violence. The SSV-AB is used with middle school and high school students to assess their beliefs about acceptability of violence, specifically measuring for perceived violence at school, attitudes towards violence, and recent acts of violence (i.e., within the past 30 days). O'Neill (2002) used the SSV-AB in urban and suburban school systems, mostly low to middle SES neighborhoods. The SSV-AB has a medium internal consistency (r > .70). Whereas, the ATDS was initially developed by the Houston Community Demonstration Project (1993) and later adapted by Bosworth and Espelage (1995) as the Self-Efficacy Teen Conflict Survey (STCS). The STCS consists of five items that measures middle school students' confidence in their ability to control their anger and sustain from violence with peers. The STCS has medium internal consistency (r = .67). The third schoolbased assessment, the A-COPE is a well-established and commonly used assessment for adolescents that includes 54 items categorized by three general coping factors (i.e., problem, cognitive, and emotion; r = .50 - .75; Chapman & Mullis, 2000). The fourth school-based assessment, the CSI is a well-established assessment for adolescents that includes 72 items, with medium to high reliability (r = .70 - .94; Tobin, 1991). A unique characteristic of the CSI is that an adolescent first describes a stressful event, then is prompted to respond to an item based on a

written description. However, both the A-COPE and CSI are limited in that they only have items to evaluate coping skills, rather than a wide range of items to measure adolescent violence.

#### **Assessment of Externalizing Behaviors**

Three commonly used school-based assessments of externalizing behaviors are observations of students as well as the Child Behavior Checklist (CBCL) and Problem Behavior Frequency Scale (PBFS). In an environment, the first school-based assessment, observations of an adolescent's behaviors are used based on an expected norm for a behavior (e.g., adhering to academic rules and expectations; Bagner et al., 2010). School observations of adolescents allow school personnel to track and monitor any externalized behavioral changes that occur in adolescents. Although observations are commonly utilized in school and social settings, observing students can create bias and subjectivity in responses of an evaluator. The second school-based assessment, the CBCL is a widely researched and a commonly used assessment for analyzing a student's behaviors and psychological problems through teacher and parent report (Achenbach & Edelbrock, 1983). The CBCL includes items that assess conduct problems, attention issues, social problems, anxiety, oppositional defiance, shyness, and depression; with medium to high internal consistency (r = .63 - .97). The CBCL relies on teacher and parent evaluation and responses.

The third school-based assessment, the PBFS is an empirically tested and commonly used assessment for both aggression and victimization; whereas, prior assessment measures did not include that combination (Dahlberg et al., 2005; Farrell et al., 2016). The PBFS is a self-report assessment by adolescents that measures areas of aggression (e.g., verbal, physical, and relational), problematic behaviors (e.g., delinquent behavior and drug use), and victimization which includes overt victimization (e.g., physical or verbal threats, insults, and behaviors) and

relational victimization (e.g., negative gossip or exclusion; Dahlberg et al., 2005; Farrell et al., 2016). The PBFS has medium to high internal consistency that ranges from .72 to .88 (Farrell et al., 1992). The PBFS includes multiple items related to aggression, interpersonal problems, and externalizing problems; however, the assessment lacks items that assess student suicidal behaviors and leakage, which are important components of adolescent violence and are identified in the criminology literature (Meloy & O'Toole, 2011).

#### **Assessment of Lack of Attachment**

The five commonly used school-based assessments for lack of attachment are the Adult Attachment Interview, Inventory for Parent and Peer Attachment (IPPA), Multidimensional Peer-Victimization Scale, Peer Victimization Scale, and Revised Adolescent Social Experience Questionnaire. The Adult Attachment Interview is a commonly used narrative and semistructured interview of conscious and unconscious attachment style that can be adapted for use with adolescents (Main, 1995). The interviewees are asked a series of questions to determine parent attachment styles. For example, questions include having an adolescent use five descriptor words for the relationship with the adolescent's parents during childhood and corresponding memories to support the descriptors, determining if an adolescent ever felt rejected or threatened, and any identifiable effect of an adolescent's personality. The interview takes roughly one hour (George et al., 1996). A second school-based assessment developed by Armsden and Greenburg (1987) is the IPPA used to assess adolescents' and young adults' attachment to parents and peers using three factors (i.e., trust, communication, and extent of anger and alienation). The IPPA consists of 28 items to assess parent attachment (r = .72 - .92) and 25 items to assess peer attachment (r = .40 - .76), which are scored on a 5-point Likert scale.

Additionally, the third school-based assessment, the Multidimensional Peer-Victimization Scale consists of 16 items used to assess physical ( $\alpha$  = .85) and verbal victimization ( $\alpha$  = .75), social manipulation ( $\alpha$  = .77), and property attacks ( $\alpha$  = .73; Mynard & Joseph, 2000). A fourth assessment is the Peer Victimization Scale that includes six items to assess victimization of bullying in schools for students ranging in ages from 8 to 11, with a Cronbach's alpha of .83 (Austin & Joseph, 1996). Finally, the Revised Adolescent Social Experience Questionnaire is used to assess social victimization (i.e., hateful gossip, rejection, and peer manipulation), with high internal consistency (r > .90) and overt victimization (i.e., physical or verbal attacks), with good internal consistency (r > .78).

#### **Summary**

Throughout Chapter II, the literature and research for the four constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) were outlined. Crisis counseling in schools was reviewed and a theoretical framework of adolescent development and violence with a focus on adolescents' internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment of the four constructs were provided. The literature on adolescent exposure to violence and a description of types of assessments (i.e., multitiered threat assessments and UMHS tools) used in schools were provided. Finally, existing assessments of pertaining to the constructs are reviewed.

### **Chapter III**

### **Research Design**

Chapter III is organized into seven sections. In the first section, the five main research questions are provided. In the second section, the research design of the proposed instrument is provided, including the design and construction of the instrument, which is followed by the third section, the outline of the participants and sample criteria. In the fourth section, the instruments that were used are outlined. The fifth and sixth sections includes an overview of the sampling procedures that were followed and the data collections procedures are outlined. Finally, in the seventh section, an outline is provided of the data analysis methods that were used to evaluate the proposed instrument, the Interdisciplinary School Violence Prevention Assessment (ISVPA).

### **Research Questions and Hypotheses**

### **Research Question One**

What is the overall factor structure of the Interdisciplinary School Violence Prevention Assessment (ISVPA)?

### Hypothesis One

Factors were derived from the items included in the ISVPA.

#### **Research Question Two**

What is the validity of the ISVPA to assess a student's risk level for school violence (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment)?

### Hypothesis Two

The ISVPA is a valid measure to assess a student's risk level for school violence (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment).

### **Research Question Three**

What is the reliability of the ISVPA to assess a student's risk level for school violence (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment)?

# Hypothesis Three

The ISVPA is a reliable measure to assess a student's risk level for school violence (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment).

### **Research Question Four**

Is there a significant relationship between school personnel's demographics (i.e., age, gender, ethnicity, professional role, and grade level) and students' risk level for school violence (i.e., ISVPA scores)?

## Hypothesis Four

A significant relationship exists between school personnel's demographics (i.e., age, gender, ethnicity, professional role, and grade level) and students' risk level for school violence (i.e., ISVPA scores).

### **Research Question Five**

Is there a significant relationship between school personnel's assessment of students' risk level for school violence (i.e., ISVPA scores) and students' demographics (i.e., age, gender, ethnicity, and grade level)?

## Hypothesis Five

A significant relationship exists between school personnel's assessment of students' risk level for school violence (i.e., ISVPA scores) and students' demographics (i.e., age, gender, ethnicity, and grade level).

#### **Research Design**

For the present research, a quantitative research design was planned to initially develop and conduct validity and reliability testing of an interdisciplinary school violence prevention assessment, the ISVPA. For the research design, an exploratory factor analysis was planned. Additional correlations were planned to analyze the participants' demographics and ISVPA scores.

### **Participants**

For the planned research, the participants were to be middle school personnel (i.e., sixth, seventh, or eighth grade teachers, principals, and school counselors) from schools in the southern region of the United States (i.e., Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia). School personnel are important to the assessment of students predominately due to school personnel's consistent interaction and familiarity with students and the ability of school personnel to notice changes in students (Cornell, 2020; O'Brennan et al., 2019).

#### Sample Size and Criteria

When conducting an exploratory factor analysis, sample size is an important consideration. A general rule for a factor analysis is to have 10 participants per instrument item (Benson & Clark, 1982; Nunnaly, 1978). In the present research, based on the initial 67 items to be included in the ISVPA, the sample size for participation was approximately 670 participants. The criteria for participation were sixth, seventh, or eighth grade school personnel (i.e., teachers, principals, and school counselors).

#### **Instruments**

Five instruments were used: (a) Expert Panel Survey, (b) Focus Group Survey, (c), Peer Review Evaluation, (d) Participants' Demographic Questionnaire, and (e) Interdisciplinary School Violence Prevention Assessment (ISVPA).

#### **Establishing the Instrument Constructs**

According to DeVellis (2017), the development of an assessment should include four steps: (a) establishing the constructs, (b) generating the item pool, (c) determining the format, and (d) utilizing an expert panel. When psychological occurrences are measured, assessments should be well established and thoroughly conceptualized (DeVellis, 2017). Threat assessment procedures are widely supported as a preventive approach to school violence. Existing threat assessments provide a step process to evaluate the contributing factors that impact a student and existing evaluative tools assess for violence through a unilateral lens (i.e., the Virginia Model of Threat Assessment by Cornell and Sheras, [2005], the STAS by Salem Keizer School District [n.d.] and Van Dreal et al. [2017], the PETRA by Schneller [2005], and the ACUTE by Copelan and Ashley [2005]). In the present research, an instrument was developed and based on an interdisciplinary approach to be used in conjunction with existing threat assessment procedures (i.e., assessments used to evaluate a communicated threat) to identify areas of student concerns and to connect students to counseling services.

For the present research, the planned instrument development was supported by four constructs described in the research literature: (a) *internalizing problems* (Powers & Bierman, 2012; Vossekuil et al., 2002; Zahn-Waxler et al., 2000), (b) *extreme beliefs* (McCauley & Moskalenko, 2008; O'Toole, 2000; Trip et al., 2019; Vossekuil et al., 2002), (c) *externalizing behaviors* (Miller & Eisenberg, 1988), and (d) *lack of attachment* (Bowlby, 1969; Hirschi, 1969).

According to DeVellis (2017), a strong foundation in empirical literature of a construct strengthens the development of an assessment, such as the ISVPA. In the present research, internalizing problems was defined as "a core disturbance in intropunitive emotions and moods (e.g., sorrow, guilt, fear, and worry)" (Zahn-Waxler et al., 2000, p. 443). Extreme beliefs were defined as "profound convictions opposed to the fundamental values of society, the laws of democracy and the universal human rights, advocating the supremacy of a certain group (racial, religious, political, economic, social, etc.)" (Trip et al., 2019, p. 1). Externalizing behaviors were defined as "the negative behaviors [that] tend to be expressed outwardly and are likely to directly affect other people and society at large...behaviors that seemingly reflect less awareness of or concern for the affective consequences of one's behavior for others" (Miller & Eisenberg, 1988, p. 325). Lack of attachment was defined as "the process of becoming alienated from others [parents, peers, and school]" (Hirschi, 1969, p. 18). The four constructs give context and background to student concerns and possible threats to others' safety. The ISVPA was developed as an interdisciplinary approach to assess the four constructs and an additional method for school violence prevention to proactively connect students to counseling services.

## Generating the Item Pool

When using an exploratory analysis, the number of items selected is an important consideration (Clark & Watson, 2019; MacCallum et al., 1999). Benson and Clark (1982) recommended initially doubling the number of items for the final instrument. In the present research, the initial item pool of 67 items was established based on what was conducive with the instrument purpose to assess for the underlying constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) that negatively impact students and could contribute to violence in schools.

First, 16 items were grounded in the available literature on internalizing problems (Powers & Bierman, 2012; Zahn-Waxler et al., 2000). Items to assess internalizing problems: "In the last 30 days, how [frequent or severe] has the student [expressed or demonstrated]" (1) nervousness, (2) low self-esteem, (3) anxiety, (4) sadness, (5) direct suicidal ideation (e.g., plan, intent, means), (6) self-critical comments, (7) victim of bullying, (8) psychosomatic symptoms (e.g., headaches, stomachaches), (9) being fearful, (10) indirect suicidal ideation (e.g., hopelessness, self-destructive), (11) spends time alone, (12) decreased academic performance, (13) withdrawn, (14) low self-confidence, (15) nervous behaviors (e.g., hand wringing, leg shaking), and (16) no guilt for harming others.

Next, 11 items were used to assess extreme beliefs: "In the last 30 days, how [frequent or severe] has the student [expressed or demonstrated]" (1) threat(s) towards self (e.g., suicide ideation or suicide attempt), (2) threat(s) towards others (e.g., school personnel, peers), (3) threat(s) towards school (e.g., school shooting), (4) indirect threat(s) in writing (e.g., "If I had the chance I would"), (5) indirect threat(s) in drawings (e.g., drawing of snakes, alligator), (6) beliefs about being wronged, (7) beliefs about being treated unfairly, (8) difficulty accepting responsibility for own actions, (9) difficulty accepting being wrong in situations, (10) difficulty accepting failure, and (11) extreme beliefs (e.g., thinks hurting others or school shootings are justified; Hirschi, 1969; O'Toole, 2000; Vossekuil et al., 2002).

Also, 25 items were developed to assess externalizing behaviors: "In the last 30 days, how [frequent or severe] has the student [expressed or demonstrated]" (1) suicidal behavior (e.g., past suicide attempts), (2) paranoid thoughts, (3) anger, (4) researching about violence, (5) self-harm (e.g., cutting self), (6) specific details of intended violence, (7) identifies with past offenders (e.g., Columbine shooters), (8) suspicious of others, (9) obtaining a weapon(s), (10)

lacks remorse, (11) loses temper easily, (12) physical fights with peers, (13) impulsive (e.g., difficulty waiting turns, acting without thinking of consequences), (14) disregard for rules, (15) fixated or obsessed with intended targets, (16) aggressive towards others, (17) difficulty dealing with losses, (18) anger outbursts, (19) behavioral problems in class, (20) leakage (e.g., harmful intent made in writings, drawings, social media posts, or communicated to peers), (21) verbal fights with peers, (22) stealing, (23) small-scale violent acts (e.g., assault, bringing a gun to school), (24) practicing plans to commit intended violence, and (25) substance use (Liu, 2004; Miller & Eisenberg, 1988; Silver et al., 2018; Vossekuil et al., 2002)

For lack of attachment, 15 items were based in the literature: "In the last 30 days, how [frequent or severe] has the student [expressed or demonstrated]" (1) parent(s) do not supervise activities, (2) parent(s) not responding to communication sent home from school, (3) parent(s) not being receptive to communication sent home from school, (4) parent(s) not being involved in their academic activities, (5) parent(s) not being involved in academic performance, (6) unable to maintain long term relationships, (7) unhealthy peer relationships, (8) negative peer influences, (9) uninterested in school activities, (10) negative attitude towards school, (11) disrespectful towards school personnel, (12) uninvolved in school activities, (13) dislikes school personnel, (14) disrespectful towards their parents, and (15) conflicts with parents (Bowlby, 1969; Hirschi, 1969).

#### **Expert Panel Evaluation**

For validity, an expert panel reviewed the 67 items. The overarching benefit of an expert panel allows for feedback regarding the 67 items' clarity and appropriateness of the four constructs (Crocker & Aligina, 2008; DeVellis, 2017; Stancliffe et al., 2017; Stolarova et al., 2014). An expert panel enhances the overall face and content validity of an instrument (Crocker

& Aligina, 2008; DeVellis, 2017). An email was sent to a total of 61 experts identified from four divergent disciplines (i.e., counseling, psychology, criminology, and sociology) requesting their participation (see Appendix A). Of the 61 experts contacted, nine agreed to participate and six submitted responses. The Expert Panel Survey was used to collect the expert feedback via email attachment (see Appendix B). The expert panelists were required to meet three of the five criteria: (a) discipline (i.e., counseling, criminology, psychology, and sociology), (b) knowledge of one of the four constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, lack of attachment, and N/A), (c) professional specialty area (i.e., school violence, internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment), (d) level of education (i.e., master's degree or doctoral degree), and (e) published article(s) on one or more of the constructs. The experts were asked to review each item using the definitions provided of the four constructs and indicate which of the four constructs fit each item. Second, experts were asked to indicate whether an item was clear (i.e., easy to understand) and appropriate (i.e., suitable for the purpose of a risk assessment). Third, experts were asked to provide any items that they believe were missing and which of the four constructs the item should be listed. Finally, general feedback was requested.

## **Focus Group Evaluation**

A focus group of graduate students was contacted by emailing one of the University of New Orleans (UNO) Educational Leadership faculty (see Appendix C). The faculty member forwarded to the graduate students the research request and informed consent that was included in the faculty email to the program's listsery, which contained a Qualtrics link to a survey (see Appendix D). The focus group members identified as three teachers and one principal. In the survey, graduate students were asked to preform one task; "indicate if each item that is to be

included on a school violence prevention assessment for school personnel (e.g., school counselors, principals, and teachers) is clear (i.e., easy to understand) with a yes or no answer."

Interdisciplinary School Violence Prevention Assessment (ISVPA) Format

According to DeVellis (2017), the overall format for an assessment is done in tandem with item generation. Based on the experts' and focus group members' evaluation of the 67 items, 38 items were retained for the final format of the Interdisciplinary School Violence Prevention Assessment (ISVPA). The items were randomized in the ISVPA to address participant bias. According to Gelin et al. (2003), quadratic effects decrease when using four or more Likert scale points. The scoring for the 38 items were based on a 4-point Likert scale for two subscales: (a) Frequency subscale (i.e., 0 = Never, 1 = Rarely, 2 = Sometimes, and 3 = Often) and (b) Severity subscale (i.e., 0 = N/A, 1 = Low, 2 = Moderate, and 3 = High). Two subscales were included, frequency and severity. The 38 items were included for each subscale, which included a score range from 0 to 114. Based on the 38 items, a total score on the frequency subscale is based on how often a student has expressed or demonstrated any of the four constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment). Based on the 38 items, a total score for severity is based on how serious or intense a student expressed or demonstrated any of the four constructs. The ISVPA scores on both subscales include three concern levels; low (i.e., 0-37), moderate (i.e., 38-76), and high (i.e., 77-114). For internalizing problems (i.e., 18 items), the three concern levels include low (0-17), moderate (18-36), and high (37-54). For extreme beliefs (i.e., 2 items), the three concern levels include low (0-2), moderate (3-4), and high (5-6). For externalizing behaviors (i.e., 14 items), the three concern levels include low (0-13), moderate (14-28), and high (29-42). Finally, for lack of

attachment (i.e., 4 items), the three concern levels include low (0-3), moderate (4-8), and high (8-12).

The three levels were adapted from O'Toole's (2000) The School Shooter: A Threat Assessment Perspective. O'Toole's (2000) low level indicates that while a few contributing concerns are identified, the "threat...poses a minimal risk to the victim and public safety" (p. 8). A moderate or medium level indicates a threat "could be carried out, although it may not appear realistic" and a high level is that a threat "appears to pose an imminent and serious danger to the safety of others" (O'Toole, 2000, p. 9). O'Toole (2000) stated that at a low level threat a student is unlikely to act on a threat as the threat may lack focus and details that present a minimal risk to the identified target. Whereas, a medium level threat includes a student's threat details that are more defined and specific to the targeted individual(s), which suggests the student communicating the threat has taken time to consider acting on the violence. For example, a student with a medium level threat references a movie that showcases violence in a writing or shares a potential location for the planned violence. Finally, O'Toole's high level threat includes a student describing the details of the violence that are specific and thorough (i.e., person, time, location, and means) and is an immediate risk of violence to the intended target(s) or general public. For example, a high level threat involves immediate law enforcement intervention.

For the ISVPA, the context that supports each level (i.e., low, moderate, and high) was supported in the available literature; however, the levels were framed in the context of identifying the level of student concerns to reduce or prevent possible risk factors. For the present research, a *low level* indicates that no concerns or a few contributing concerns were indicated (i.e., small number of ISVPA items rated). Two examples using the ISVPA that could result in a low level (i.e., minimal concerns), with a 0 or 8 score and none or two of the items

rated at a 4 for each item. However, even though a score of 0 or 8 is considered a low level, it is possible that a student does have a high level depending on which items were rated (e.g., item 10, identifies with past offenders, Columbine shooters; item 13, threats towards school, and item 19, obtaining weapon[s]). To address a low level concern with a high rated concern(s), an openended question is included on the ISVPA; "Describe any additional information you would like to provide on the student." When a low level is the assessment, further evaluation should occur.

For the results of *moderate* and *high levels*, a score refers to an increased number of student concerns (i.e., ISVPA items) that should be considered to provide background context to the threat assessment procedures. An example with a moderate and high level is a student's score of 70 on the frequency subscale (i.e., moderate level) and a score of 110 on the severity subscale (i.e., high level) that could indicate the student's concerns are high and referrals for counseling service are needed. The ISVPA is designed to be used in conjunction with existing threat assessment procedures. As suggested by Vossekuil et al. (2002), consultation with others, like members of the multidisciplinary threat assessment team, law enforcement, school administration, and colleagues (i.e., mental health professionals or physicians) who specialize in the assessment of violence are encouraged. Despite the final total scores on the frequency and severity subscales and level of concerns (i.e., low, moderate, and high) that result on the ISVPA, the student's concern(s) should be considered in the assessment, as well as consultation with other school personnel and clinical judgment should be used. Additionally, an unbiased and objective view should be taken when completing and interpretating the results of the ISVPA to safeguard against the potential to profile or label a student as at risk.

### **Peer Review Group Evaluation**

As indicated by Benson and Clark (1982), evaluation from peer reviewers can contribute to the validation of an instrument. An email was sent to doctoral students through UNO's Counselor Education Program COUNDOC listserv that included an informed consent (see Appendix E). Four UNO graduate counseling doctoral students who were supervisors of a school counselor agreed to be reviewers. Peer reviewers were asked to preform two tasks that were included in a Qualtrics link: (a) complete the ISVPA on one student who they remember as being in the sixth, seventh, or eighth grade and (b) provide any general written feedback about the ISVPA (see Appendix F).

### Participants' Demographic Questionnaire

Participant demographic information was collected (i.e., middle school personnel; teachers, principals, and school counselors) using the Demographic Questionnaire (see Appendix G). The Demographic Questionnaire consisted of five items: (a) age, (b) gender, (c) ethnicity, (d) professional role (i.e., teacher, principal or school counselor), and (e) grade level (i.e., sixth, seventh, eighth, or more than one middle school grade). Additionally, participants indicated the following four demographics to describe a chosen student who they think was impacted by the factors assessed on the ISVPA: (a) age, (b) gender, (c) ethnicity, and (d) grade level (i.e., sixth, seventh, or eighth grade). Age was numerically coded. Gender was nominally coded into five categories: (a) male = 1, (b) female = 2, (c) non-binary = 3, (d) transgender = 4, and (e) other = 5. Ethnicity was nominally coded as: (a) White = 1, (b) Black or African American = 2, (c) American Indian or Alaska Native = 3, (d) Latino or Hispanic = 4, (e) Native Hawaiian or Pacific Islander = 5, and (f) other = 6. School personnel's role was nominally coded into three categories: (a) teachers = 1, (b) principals = 2, and (c) school counselors = 3. Grade level was

nominally coded into four categories: (a) sixth grade= 1, (b) seventh grade = 2, (c) eighth grade = 3, and (d) more than one middle school grade = 4. No individual school names were collected, nor were the chosen student's identifying information collected.

#### **Data Collection Procedures**

Before data collection procedures occur, the present research was submitted to UNO's Institutional Review Board (IRB) for approval. As part of the IRB requirements, all participants (i.e., school personnel) received an informed consent that outlined the current research (see Appendix H). The informed consent ensured participation is voluntary. For the participants, the teachers and principals were anonymous. For school counselors, they were prompted to provide a contact email address for retest purposes. All data from the school personnel; teachers, principals, and school counselors were aggregated to protect confidentiality of an individual and participants were given a code as an identifier.

For the data collection procedures, school personnel were asked to rate each item on both the Frequency and Severity Subscales on the final version of the ISVPA about one student who they remember as being in the sixth, seventh, or eighth grade (see Appendix I). Only broad demographic information was collected from school personnel participants (i.e., age, gender, ethnicity, professional role, and grade level) and their chosen anonymous student (i.e., age, gender, ethnicity, and grade level). No data was linked to a particular school, personnel, or student. Middle school counselors will serve as the retest sample and will be asked to complete the ISVPA a second time on the same student as they had chosen for the first completion.

School personnel associations were asked to distribute the participant request that included the informed consent and Qualtrics link to their members (see Appendix H). After associations agreed, requests to participate in the present research was sent to school personnel

through email that included a link to the informed consent (see Appendix H), Demographic Questionnaire (see Appendix G), and ISVPA (see Appendix I).

#### **Research Questions and Data Analysis**

The present research planned to include the psychometric analysis of the proposed Interdisciplinary School Violence Prevention Assessment, the ISVPA. The data analysis procedures planned were to examine the factor structure, validity, and reliability of the ISVPA.

### **Research Question One**

What is the overall factor structure of the ISVPA?

#### Data Analysis

Using SPSS, an exploratory factor analysis was planned to examine the first research question. A factor analysis is a method of data reduction (Field, 2013). A factor analysis assesses the relationship in a cluster of observable variables with an unobservable variable (i.e., latent variable), where variables often are represented as an item or question on an instrument (Beavers et al., 2013; Field, 2013). Latent variables refer to the types of variables that are difficult to observe, which include thoughts, feelings, behaviors, and attributes (Abell et al., 2009).

An exploratory factor analysis was planned to assess multiple factor rotations. In the final matrix, the items and inter-item relationships would be provided, and items that should be removed from the analysis for best fit will be removed from the ISVPA. Examining the variance and covariance among the items would be used to determine the structure of the instrument and the existing factors (Field, 2013). A scree plot would be used to graph the eigenvalues for each factor that emerged. Stevens (2002) recommended a factor loading value of .40 or greater, which will be used in the present research. Additionally, as stated by Hutcheson and Sofroniou (1999), acceptable Kaiser values range from the .70s to the .90s, which would be used.

### **Research Question Two**

What is the validity of the ISVPA to assess a student's risk level for school violence (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment)?

### Data Analysis

The process of validation ensures the instrument has measured what it was designed to measure (Abell et al., 2009; Dimitrov, 2012; Field, 2013). The proposed research utilized two types of validity; content and construct.

**Content Validity.** Content validity was planned through the use of an expert panel (Benson & Clark, 1982; DeVellis, 2017; Ding, 2019; Vrbnjak et al., 2016; Zelt et al., 2018). An expert panel provides feedback, judgment, and perspective towards an instrument's overall clarity, appropriateness of items regarding the construct, and scale construction (DeVellis, 2017; Dimitrov, 2012; Vrbnjak et al., 2016). Results from the expert panel are important to item modification, elimination, and may enhance content validity (Zelt et al., 2018). In the present research, expert panelists are required to meet three of the five criteria: (a) discipline (i.e., counseling, criminology, psychology, and sociology), (b) knowledge of one of the four constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, lack of attachment, and N/A), (c) professional specialty area (i.e., school violence, internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment), (d) level of education (i.e., master's degree or doctoral degree), and (e) published article(s) on one or more of the constructs. Once expert panelists agree to participate and meet the criteria requirements, they were asked to perform four tasks: (a) indicate which of the four constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) fits each item, (b) indicate with a yes or no, whether each item is clear (e.g., easy to understand) and appropriate

(e.g., suitable for the purpose of a risk assessment), (c) provide any items that the panelist believes are missing and which of the four constructs the item should be listed, and (d) provide general feedback (see Appendix A).

As suggested by Benson and Clark (1982), additional feedback from a target group assesses content validity. Once the expert panel review was completed, a focus group of three to four school personnel (i.e., teachers and principals) were contacted via email through convenience sample and asked to preform one task: determine if the items included on the ISVPA are clear (i.e., easy to understand) indicating yes or no (see Appendix C and D). Following the results from the focus group, a peer review group of doctoral counseling students (i.e., who have supervised school counselors or have experience in school counseling) completed the ISVPA and provided general feedback (see Appendix E and F). The peer reviewers were contacted via email through the COUNDOC listsery, which included an informed consent. The peer reviewers were asked to preform two tasks: (a) first, complete the ISVPA on one student who they remember as being in the sixth, seventh, or eighth grade who has been impacted by the factors assessed in the ISVPA and (b) second, provide any general written feedback. Assessment of approximate time to complete the instrument was assessed. For both the focus and peer review groups, the informed consent ensured participation is voluntary and anonymous. Also, focus and peer review groups were able to choose not to participate or withdraw at any time without penalty.

Construct Validity. Construct validity was planned through the use of an exploratory factor analysis with a sample of approximately 670 school personnel. When using an exploratory factor analysis, construct validity is evident if factors emerge that reflect the construct(s) that an assessment is based on (Benson & Clark, 1982). To establish construct validity, the ISVPA items

were based on four main constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) found in the existing literature. Additionally, the short answer section of the ISVPA was used to assess construct validity.

# **Research Question Three**

What is the reliability of the ISVPA to assess a student's risk level for school violence (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment)? Data Analysis

Reliability refers to whether the instrument is consistent and free from error (Dimitrov, 2012; Gravetter & Wallnau, 2013). Internal consistency and test-retest will be used to assess reliability of the ISVPA.

Internal Consistency. In the proposed research, the ISVPA's internal consistency was planned. Internal consistency is a type of reliability that refers to the correlational relationship between items and the extent that the items measure the same construct (Dimitrov, 2012; Field, 2013; Leedy & Ormand, 2010). Cronbach's alpha (Cronbach, 1951) is a common statistical measure to assess scale reliability and is beneficial to determine any significant differences that exist in an item and any covariance between items (Field, 2013; Vrbnjak et al., 2016). A value of .70 to .80 was the range of acceptable value (Field, 2013). Inter-item correlations represent significant relationships between items and a latent variable (DeVellis, 2017). Items should be moderately correlated to exhibit reliability (Burton & Mazerolle, 2011). For the present research, Cronbach's alpha was planned to assess reliability of the items included in the ISVPA and interitem correlations were assessed at a .01 significance level.

**Test-retest.** For the present research, test-retest reliability was planned (Abell et al., 2009; Field, 2013). A follow up subsample of 100 school counselors was planned for the test-

retest of the ISVPA. School counselors would be asked to complete the ISVPA for a second time on the same student they chose for the first completion of the ISVPA. A Pearson correlational analysis was planned on participants' previous ISVPA scores with their second ISVPA scores. The Pearson correlation coefficient was planned to determine if test-retest reliability exists among the sample of school counselors (Field, 2013). The Pearson correlation coefficient were the following levels: r = .10 (i.e., small effect), r = .30 (i.e., medium effect), and r = .50 (i.e., large effect; Cohen, 1992).

#### **Research Question Four**

Is there a significant relationship between school personnel's demographics (i.e., age, gender, ethnicity, professional role, and grade level) and student's risk level for school violence (i.e., ISVPA scores)?

## Data Analysis

Descriptive statistics and Pearson correlations were planned to determine significant relationships between school personnel's demographics and their scores on the ISVPA. School personnel's age, gender, ethnicity, role, and grade level were planned for the descriptive and correlational analyses.

## **Research Question Five**

Is there a significant relationship between school personnel's assessment of students' risk level for school violence (i.e., ISVPA scores) and students' demographics (i.e., age, gender, ethnicity, and grade level)?

# Data Analysis

Descriptive statistics and Pearson correlations were planned to determine any significant relationships between school personnel's scores on the ISVPA and student's demographics.

# **Summary**

Throughout Chapter III, the proposed methods, procedures, design, and psychometric evaluation of the ISVPA are outlined. The seven sections include a description of the following:

(a) five main research questions and hypotheses, (b) research design for the ISVPA development and construction, (c) participants and sample criteria, (d) instruments, (e) sampling procedures, (f) data collection procedures, and (g) data analysis.

### **Chapter IV**

#### **Results**

The purpose of the present research was to develop the Interdisciplinary School Violence Prevention Assessment (ISVPA), a school violence prevention assessment based on literature from four disciplines (i.e., counseling, psychology, criminology, and sociology). A valid and reliable school violence prevention assessment to examine factors that impact students could assist school personnel to proactively identify and connect a student in need of counseling services.

Due to significant data collection challenges that were impacted by COVID-19 (e.g., illnesses and burnout) and Hurricane Ida (e.g., dangerous weather conditions and rebuilding), the present research design was revised. In the previous research design, data collection plans included approximately 380 participants for an exploratory factor analysis and parametric correlations. However, based on the extremely low participation rate, the research design was shifted to a pilot study and nonparametric analyses. When using Viechtbauer et al. (2015) sample size calculator for a pilot study with a 90% confidence level and 5% probability, a minimum *N* would be 45. In the present research, a 75% confidence level and a 5% probability were used to derive a *N* of 27. Additionally, the present research design was reframed using Hertzog's (2008) pilot study approach and data analysis that included three main areas: (a) "feasibility... a wide range of possible aims for identifying and resolving problems" (e.g., completion time, confidence intervals, p. 181), (b) "adequacy of instrumentation" (e.g., item performance, p. 182), and (c) "planning for a larger study" (e.g., effect size, power, p. 185).

### Experts, Focus Group, Peer Reviewers, and School Personnel

Using Hertzog's feasibility approach, data collection began in March 2021 and continued until February 2022 that included a wide range of evaluators (i.e., expert panel, focus group, and peer review group) as well the participants (i.e., school personnel).

### **Expert Panel**

The utilization of an expert panel is important to the instrument development process and can be used to assess content validation (Abell et al., 2009). For the present research, expert panelists were required to meet three of the five following criteria: (a) practices in at least one discipline (i.e., counseling, criminology, psychology, and sociology), (b) knowledge of one of the four constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, lack of attachment, and N/A), (c) knowledge in a professional specialty area (i.e., school violence, internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment), (d) met one level of education (i.e., master's degree or doctoral degree), and (e) published article(s) on one or more of the four constructs.

In March to June 2021; 61 experts were identified using internet searches for specialty areas in school violence based on four disciplines (i.e., counseling, psychology, criminology, and sociology) including 18 counseling, 14 psychology, 7 criminology, 10 sociology, 3 criminology/psychology, 4 counseling psychology, 2 sociology/criminology, 1 social work, 1 social science, and 1 school research. All 61 experts were emailed requesting their participation (see Appendix A). Experts who had not responded to the participation email were sent one to two follow up emails within approximately one-month from the initial contact. Experts who agreed to participate were sent an expert panel survey (see Appendix B). Of the 61 experts who

were contacted, 9 experts agreed to participate. Two follow up emails were sent to three experts who had not completed the survey. By June 2021, six experts completed the survey.

# **Expert Panel Demographics**

Demographics for the six experts' discipline included two from psychology, two from criminology, one from counseling and psychology, and one from sociology and education. Expert one has a master's degree in educational psychology and knowledge in the constructs of internalizing problems, extreme beliefs, and externalizing behaviors, with a specialty area in school violence. Expert two has a doctoral degree in clinical psychology, with a specialty in school violence (i.e., "I am not sure these are 5 recognized specialty areas"). Expert three has a doctoral degree in criminal justice and has knowledge of internalizing problems, externalizing behaviors, and lack of attachment; with specialty areas in school violence, externalizing behaviors, and lack of attachment. Expert four has a doctoral degree in counseling psychology and has knowledge in internalizing problems and externalizing behaviors; with specialty areas of school violence, internalizing problems, and externalizing behaviors. Expert five has a doctoral degree in criminology and criminal justice and has knowledge in internalizing problems, externalizing behaviors, and lack of attachment constructs, with specialty areas in school violence, internalizing problems, externalizing behaviors, and lack of attachment. Finally, expert six has a doctoral degree in sociology and education; with a specialty area in school violence. All six experts had publications in one or more of the constructs (see Table 1).

**Table 1**  $Expert \ Panel \ Demographics \ (N = 6)$ 

Expert	Discipline	Construct Knowledge	Specialty Area	Education	Publications
One	Psychology	IP, EB, EX	School Violence	Master	Yes
Two	Psychology		School Violence	Doctoral	Yes
Three	Criminology	IP, EX, LA	School Violence, EX, LA	Doctoral	Yes
Four	Counseling	IP, EX	School Violence; IP, EX	Doctoral	Yes
	Psychology				
Five	Criminology	IP, EX, LA	School Violence; IP, EX,	Doctoral	Yes
			LA		
Six	Sociology,		School Violence	Doctoral	Yes
	Education				

*Note*. IP = internalizing problems; EB = extreme beliefs; EX = externalizing behaviors; LA = lack of attachment

## **Focus Group**

In May 2021, a focus group of graduate students was contacted by emailing one of UNO's Educational Leadership faculty (see Appendix C). The faculty member forwarded to the graduate students the research request and informed consent that was included in the faculty email to the program's listsery, which contained a Qualtrics link to a survey (see Appendix D). The focus group members identified as three teachers and one principal. In the survey, graduate students were asked to preform one task; "indicate if each item that is to be included on a school violence prevention assessment for school personnel (e.g., school counselors, principals, and teachers) is clear (i.e., easy to understand) with a yes or no answer."

# **Peer Review Group**

As indicated by Benson and Clark (1982), evaluation from peer reviewers can contribute to the validation of an instrument. During August through September 2021, an email was sent to doctoral students through UNO's Counselor Education Program COUNDOC listserv that included an informed consent (see Appendix E). Four UNO graduate counseling doctoral students who were supervisors of a school counselor agreed to be reviewers. Peer reviewers were

asked to preform two tasks that were included in a Qualtrics link: (a) complete the ISVPA on one student who they remember as being in the sixth, seventh, or eighth grade and (b) provide any general written feedback (see Appendix F).

#### **School Personnel**

During October, 2021 to February, 2022; online data collection from the school personnel participants (i.e., middle school teachers, principals, and school counselors) began. A significantly low response rate occurred from the participants despite multiple attempts at data collection (i.e., 86 organizations were contacted, with four to six follow ups, over a five month timeframe) and lack of participant adherence to instructions (i.e., two school personnel participants did not provide responses to the 38 severity subscale items). Hertzog (2008) stated that attrition rates such as what occurred in the present research can be problematic to the sample size. In the present research, 52 total responses were collected; however, due to participant drop out; 23 responses were unanswered and 2 were incomplete. The total completed responses resulted in a sample of 27.

#### **Data Collection Phases**

Based on the amount of time (i.e., October, 2021 to February, 2022) and revisions (e.g., IRB revisions, population changes) that occurred, data collection with the participants (i.e., school personnel; teachers, principals, and school counselors) occurred in three phases.

#### First Data Collection Phase: October 2021

Data collection began in early October of 2021. The first email participation requests were sent through 32 *southern regional* school personnel associations for teachers, principals, and school counselors included an informed consent (see Appendix H), with a Qualtrics link to the final version of the ISVPA (see Appendix I). Participants were asked to complete the

following: (a) Demographic Questionnaire (see Appendix G) and (b) final version of the Interdisciplinary School Violence Prevention Assessment (ISVPA) on one student who they remember as being in the sixth, seventh, or eighth grade (see Appendix I). School personnel participants were instructed to not identify their chosen student. Follow up emails were sent every two weeks to professional associations who had not responded. Despite recruitment efforts, participation responses were extremely low (i.e., 3 responses by October 31, 2021, with one incomplete).

#### Second Data Collection Phase: October to December 2021

After an addendum to the IRB was approved in late October of 2021, the second phase of the data collection occurred. A total of 22 national organizations (i.e., 1 school counselor and 21 teachers and principals), association forums through member portals (i.e., 4 school counselors), and a social media group (i.e., 1 education) were used to contact participants (i.e., school personnel). The 22 school personnel national organizations were contacted by email and asked to distribute the participant request and informed consent to their members (see Appendix H).

Additionally, the participation request and informed consent was posted directly to school counselor association forums accessed through four member portals (i.e., [1] ASCA Scene using three forums; [2] American Counseling Association, ACA Connect using three forums; [3] Louisiana Counseling Association, LCA, using one forum; and [4] Louisiana School Counselor Association, LSCA using one forum; see Appendix H). Charter School Counselors, Open Forum, and Middle/Junior High School Community were the three forums for ASCA Scene. ACA Interest Network for Professional Counselors in Schools, ACA Professional School Counselors, and Call for Study Participants were the three forums for ACA Connect. A general forum was

used for LCA and LSCA member portals. Potential participants could access the present research's participation request if they subscribed to one of the forums.

Also, the participation request and informed consent was posted to one private education social media group (i.e., Louisiana State University Geaux Teach English Program Alumni). Posts to social media groups were shortened and included a Qualtrics link that directed participants to the informed consent and then to the instrument if a participant chose to continue (see Appendix J). The postings were made on behalf of the present researcher by a doctoral committee member. An example of a social media group is Facebook. Potential participants were able to access the participation request if they were a member of the private group and approved by group moderators.

# Third Data Collection Phase: January to February 2022

In early December, 2021, after the second IRB addendum was approved, the third phase of the data collection occurred. Additional organizations for school personnel groups were contacted (i.e., 6 social media groups, 17 graduate programs, 2 associations, and 2 snowball method). A link to the Qualtrics survey with the informed consent was posted to six private social media groups for teachers, principals, school counselors, and counselor educators (i.e., Caught in the Middle School Counselor, Professional Counseling Connections, School Counselors Connect, Counselor Support Group, New Jersey School and SAC Counselors Online Collaborative, and School Counselor Educators Discussion Group). Posts were shortened and contained a Qualtrics link that directed participants to the informed consent and instrument if they chose to participate (see Appendix K). Potential participants could access the present research's participation request if they had previously requested to join the private group that prompted a series of questions to be answered related to the counseling field and were

subsequently approved by group moderators. Participants in the groups could include current school counselors, school counselors in training, and individuals previously in an academic field transitioning to school counseling.

Additionally, 17 graduate level programs (i.e., eight education and nine counseling doctoral programs) were contacted by email (see Appendix L) and asked to distribute the participant request and informed consent (see Appendix H). The eight education graduate programs were selected based on suggestion from UNO Educational Leadership faculty and an internet search (i.e., via Google); whereas, the nine counseling doctoral programs were chosen using internet searches (i.e., via Google). Two additional school counseling related organizations (i.e., New Jersey School Counselor Association and two school counselor consultants for New Jersey Center for Women and Information Technology Counselors for Computing) were contacted by email and two direct snowball sampling methods were used. A work colleague of the present researcher and a current school counselor were contacted and were encouraged to relay the participant request to anyone that they believed met the criteria.

By February 2022, school personnel (i.e., middle school teachers, principals, and school counselors) from 86 state, regional, and national teacher, school administrative, principal, and school counselor organizations, school associations, social media, and graduate level education and counseling doctoral university programs were contacted by emails or internet postings. By February 13, 2022, a total of 52 responses were received. Of the total responses collected, 23 were unanswered (i.e., surveys were opened by participants, but no questions were answered), 2 were incomplete (i.e., no responses to the 38 severity subscale items), and 27 were completed.

#### School Personnel Demographics

In the present research, school personnel included 5 teachers (18.50%), 4 principals (14.80%), and 18 school counselors (66.70%), with ages that ranged from 29 to 63 years old (M = 46.76, SD = 9.01).

For the 5 teachers, 1 was male (3.70%) and 4 female (14.80%), with ages that ranged from 32 to 54 years old (M = 46.20, SD = 8.79). All teachers were White (18.50%), with 2 from sixth grade (7.40%) and 3 from more than one middle school grade (11.10%). The 4 principals were female (14.80%), with 2 indicated White (7.40%) and 2 Black/African American (7.40%), with ages that ranged from 40 to 54 years old (M = 48.50, SD = 6.19). All were from more than one middle school grade (14.80%).

For the 18 school counselors, 2 reported male (7.40%), 14 female (51.90%), and 2 no response (7.40%), with ages that ranged from 29 to 63 years old (M = 46.50, SD = 10.03). For ethnicity, 13 reported White (48.20%), 2 Black/African American (7.40%), 1 Latino/Hispanic (3.70%), and 2 no response (7.40%). Two school counselors were from sixth grade (7.40%), 2 from eighth grade (7.40%), 12 from more than one middle school grade (44.50%), and 2 were no response (7.40%); see Table 2).

Table 2 School Personnel Demographics (N = 27)

	Range	М	SD	f	%
Age	29-63	46.76	9.01		
Teachers				5	18.50
Gender					
Male				1	3.70
Female				4	14.80
Age	32-54	46.20	8.79		
Ethnicity					
White				5	18.50
Grade Level					
Sixth Grade				2	7.40
More than one middle school				3	11.10
grade					
Principals				4	14.80
Gender					
Female				4	14.80
Male				0	0.00
Ethnicity					
White				2	7.40
Black/African American				2	7.40
Age	40-54	48.50	6.19		
Grade Level					
More than one middle school				4	14.80
grade					
School Counselors				18	66.70
Gender					
Male				2	7.40
Female				14	51.40
No Response				2	7.40
Age	29-63	46.50	10.03		
Ethnicity					
White				13	48.20
Black/African American				2	7.40
Latino/Hispanic				1	3.70
No Response				2	7.40
Grade Level					
Sixth Grade				2	7.40
Eighth Grade				2	7.40
More than one middle school				12	44.50
grade					
No Response				2	7.40

Additionally, school personnel provided demographics on their chosen anonymous student; 14 were male (51.90%), 11 female (40.70%), 1 non-binary (3.70%), and 1 no response (3.70%). Students' ages ranged from 11 to 15 years old (M = 13.00, SD = 1.30). Ethnicity

included 14 White (51.90%), 10 Black/African American (37.00%), 1 American Indian/Alaskan Native (3.70%), 1 Other (3.70%), and 1 no response (3.70%). Students' grade levels were 7 sixth (25.90%), 5 seventh (18.50%), 14 eighth (51.90%), and 1 no response (3.70%; see Table 3).

**Table 3**Student Demographics (N = 27)

	Range	М	SD	f	%
Age	11-15	13.00	1.30		
Gender					
Males				14	51.90
Females				11	40.70
Non-Binary				1	3.70
No response				1	3.70
Ethnicity					
White				14	51.90
Black/African American				10	37.00
American Indian/Alaskan Native				1	3.70
Other				1	3.70
No response				1	3.70
Grade Level					
Sixth Grade				7	25.90
Seventh Grade				5	18.50
Eighth Grade				14	51.90
No response				1	3.70

#### **Data Analysis for Feasibility**

In the present research, data analysis procedures were shifted to both qualitative and quantitative approaches for the four revised research questions. According to Zamanzadeh et al. (2015), the process of content validation of an instrument is methodical and subjective. Content validity refers to significance, proportional representativeness, and quality of the instrument items (Dimitrov, 2012; MacCallum et al., 1999). Based on Hertzog's (2008) recommendation for feasibility, two types of data analyses were used to establish validity of the ISVPA items (i.e., qualitative and quantitative). For the present research, content validation was achieved through

an extensive literature review, expert panel, focus group, and peer reviewer evaluations, as well as the 27 participants (i.e., school personnel) completion of the ISVPA.

## **Research Question One**

What is the extent to which the ISVPA measures the four constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment)?

# Qualitative Analysis of Expert Evaluation of 67 ISVPA Items

An expert panel is important to the instrument development process (Abell et al., 2009) and revisions based on expert's evaluation are a critical contributor to the validity of an instrument (Abell et al., 2009; Tran et al., 2017). In the present research, six experts reviewed the 67 ISVPA items. A qualitative approach was used to analyze the evaluation provided by the expert panel. The researcher used a modified version of Moustakas' (1994) step approach to qualitative data analysis. The qualitative approach in the present research included five steps: (a) review of the evaluation from the three groups (i.e., expert panel, peer reviewers, and school personnel) several times to fully grasp the content, (b) take notes for each group's evaluation, (c) determine emerging themes from the notes, (d) develop categories based on the identified themes, and (e) provide quotes to support the categories.

Five Themes. For the first step, the expert's evaluation was reviewed several times to ensure the content was understood. Second, notes were taken and used to indicate expert panel discipline, knowledge of the constructs, and specialty area to provide context and background to the expert evaluation provided (see Table 4). In the third step, five themes emerged based on the data from the expert evaluation that included the following: (a) Implementation, (b) Target Participants, (c) Operationalized Definitions, (d) Constructs, and (f) Items. For theme one, Implementation included ideas surrounding the clarity of the ISVPA's context and utilization.

For example, expert panelist one stated, "If your are intending your measure to be used by school-site teams collaboratively, it will need to be specific, simple, and focused on established risk factors... leading practice suggests that collaborative assessment is the best route." Expert two referenced a different model commonly used in threat assessment procedures and stated that the "emphasis is placed on identifying needs for intervention and strategies to reduce risk rather than make predictions of violence or assign risk scores."

In addition to the evaluation provided by the six experts, several potential experts' made comments about the negative connotations of a *risk* assessment for school violence that was used in some of the documentation (i.e., survey) emailed in the initial recruitment. General email feedback strongly suggested that the focus of any assessment be made based on a *threat* assessment approach instead of a *risk* approach, as threat assessments have been widely supported in the preventative and proactive approach to school violence. Following the expert panel evaluation and general feedback received, the assessment documentation and approach were shifted from a risk to threat assessment.

For theme two (i.e., Target Participants), ideas were about the intended population the ISVPA was to be used by (e.g., school personnel or experts of threat assessments). For example, expert one stated, "staffers may not use it because of the time commitment and the learning curve...If you are intending it to be used by an expert providing a threat assessment in the schools, then the complexity may be ok." For theme three (i.e., Operationalized Definitions), ideas surrounded areas being assessed on the ISVPA. For example, expert one and two both indicated item importance only when "situational variables" exist and expert panelist one stated, "if your intention is to identify risk factors for targeted violence (aggression with the outcome of severe or lethal injury) and or reactive aggression, I'm not sure about the categories" (e.g.,

internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment). For theme four (i.e., Constructs), ideas were about the construct definitions. For example, expert three suggested, "antisocial attitudes' as a new construct for some items that are unclear" and "some of these items could fit into multiple constructs." Expert four gave feedback on the construct definitions by quoting "definitions of the above noted constructs may be a bit outdated...more modern definitions [are] used in relation to risk assessment" and recommended "school connectedness...rather than attachment."

Finally, for theme five (i.e., Items), ideas included were specific to the instrument items. For example, expert two stated "rely less on expert opinion about these items and more on empirical evidence…helpful to look at the three pathways to violence (conflict, crime, and psychosis) with distinguishable risk factors." Expert three suggested "additional items to consider could be more victimization experiences…peer rejection, more detailed questions on substance use, social competence, disability, and academic achievement…include whether the school has a violent culture or disorder" (see Table 4).

Three Categories. The five themes were collapsed into three categories: (a) Intended Population, (b) Redefining Constructs, and (c) Item Revisions. Themes one (i.e., Implementation) and two (i.e., Target Participants) were collapsed to create category one (i.e., Intended Population). For category one, Intended Population, expert evaluation indicated that the instrument needed to be specific and clear when used by school site teams because of the length of the ISVPA and time commitment, which could impact the completion rate.

Themes three (i.e., Operationalized Definitions) and four (i.e., Constructs) were collapsed to form category two (i.e., Redefining Constructs). Based on the expert evaluation; all four experts provided evaluation regarding the constructs, which indicated that the definitions

required clarification to ensure that each construct was distinguishable and that updated definitions were used. Finally, theme five (i.e., Items) was collapsed to form category three (i.e., Item Revisions). Several suggestions were made by experts two and three regarding additional items to consider (i.e., pathways to violence and victimization experiences).

**Table 4**  $Expert\ Evaluation\ Theme\ Analysis\ of\ ISVPA\ 67\ Items\ (N=4)$ 

Five	Three	Theme	Expert	Expert	Expert	Expert
Themes	Categories	Total	One	Two	Three	Four
Implementation	Intended Population	2	X	X		
Target Participants		1	X			
Operationalized Definitions	Redefining Constructs	2	X	X		
Constructs		2			X	X
Items	Item Revisions	2		X	X	
Total Themes		9	3	3	2	1

*Note*. Experts five and six did not provide qualitative evaluation, thus they were not included in the table.

# Quantitative Analysis of Expert Evaluation of 67 ISVPA Items

Based on the 67 items included on the survey emailed to the experts, a quantitative approach was used for their evaluations to determine which of the four constructs fit an item. The criteria for whether an item fit one of the four constructs was the agreement of four or more experts. Based on four or more experts' agreement, 41 of the 67 items fit one construct. A total of 21 items (i.e., items 1-7, 10, 12, 17, 20, 23, 25, 28, 33, 37, 39-42, and 53) fit internalizing problems, 2 items (i.e., 16 and 32) fit extreme beliefs, 14 items (i.e., 21, 22, 34, 43, 44, 52, 54, 56-59, 61, 63, and 65) fit externalizing behaviors, and 4 items (i.e., 9, 47, 60, and 62) fit lack of attachment.

For further evaluation of the 67 items, four or more experts indicated that 54 items were clear (i.e., 1-7, 10, 12, 15, 16, 18-22, 25-33, 35, 37-50, 52, 54, 56-58, 61, 63, 65, and 66).

Additionally, four or more experts indicated that 43 items were appropriate (i.e., 1-8, 10, 14-17,

19-22, 25, 27, 29, 32, 34, 38-40, 43, 45-49, 52, 53-58, and 65). For the final results of the expert evaluation, 41 of the 67 items were retained (i.e., items 1-7, 9, 10, 12, 16, 17, 20-23, 25, 28, 32, 33, 34, 37, 39-44, 47, 52-54, 56-59, 60-63, and 65), with an inclusion ratio of four or more expert's agreement that an item reflected the given construct and contributed to content validation.

# Quantitative Analysis of Focus Group Evaluation of 67 ISVPA Items

To further validation procedures, a focus group (i.e., teachers and principals) was used. According to Benson and Clark (1982), additional evaluation of an instrument from a target group (i.e., the intended population to use the instrument) assesses content validity. For the present research, a focus group provided a survey evaluation on the 67 items included in the ISVPA (see Appendix D). The quantitative analysis of the focus group evaluation was based on three or more members' determining clarity of an item. Items with only one (i.e., 1:4) or two (i.e., 2:4) focus group members' agreement on item clarity were not included (see Table 5).

**Table 5**Quantitative Analysis of Focus Group Evaluation of Item Clarity: 67 Items (N = 4)

Question	4:4	3:4	2:4	1:4
Clarity:	3, 4, 6, 7, 11, 15, 19-24,	2, 8-10, 13, 14, 16-18,	1, 5, 12	25
<i>Y</i> -Yes	26-28, 31-39, 41, 43-54,	29, 30, 40, 42, 55, 56,		
	57-61, 63, 64, 66, 67	62, 65		
Clarity:		25	1, 5, 12	2, 8-10, 13, 14, 16-18, 29,
<i>N</i> -No				30, 40, 42, 55, 56, 62, 65
Total	46	18	3	18

*Note*. Ratio was three or more focus groups members' agreement of clarity of items.

Additionally, the focus group evaluation of the 67 items was cross-checked with the 41 items retained from the expert panel's evaluation. Based on the focus group's evaluation, three items were unclear and removed from the ISVPA (i.e., 1 nervousness, 12 self-critical comments, and 25 beliefs about being wronged). The final result of the evaluation by the focus group and

the expert panel was that 38 items were included in the ISVPA as clear (i.e., easy to understand) and retained.

## Qualitative Analysis of Peer Reviewer Evaluation 38 ISVPA Items

To further validation procedures and following the expert panel and focus group analysis as well as revisions made to the ISVPA based on the panel and focus group evaluation, the doctoral peer reviewers provided a written evaluation; although their written evaluation was minimal. Similar to the expert panel, a five-step qualitative approach was used to analyze the peer reviewers' evaluation. First, the peer reviewer evaluation was reviewed several times to ensure understanding. In the second step, notes were used to indicate that the four reviewers were supervisors of school counselors to give context to their evaluation. Only three peer reviewers provided a written evaluation.

For the third step, two themes emerged: (a) Scale Construction and (b) Suggestions for Revisions. For theme one (i.e., Scale Construction), ideas related to the instrument developed and the detail included. For example, peer reviewer one stated, "great scale;" reviewer two said, "quite thorough;" and reviewer three said, "covers similar concepts." For theme two (i.e., Suggestions for Revisions), ideas related to the inclusion of examples on current items or suggestions for additional items. Reviewer one recommended adding examples; whereas, reviewer two recommended additional items (i.e., "time spent with antisocial peers" and "decreases in previously engaged pro-social activities"). For example, reviewer one believed that clarity was needed for item entitled "disrespectful to school personnel" and examples were subsequently added (i.e., offensive language or ignoring direct request). Reviewer two mentioned "I would also inquire about is time spent with antisocial peers. Also, would uninvolved in school activities capture decreases in previously engaged pro-social activities?"

Based on the written evaluation by the three peer reviewers, item 33 was revised to "disrespectful towards school personnel (e.g., offensive language or ignoring direct request)." New items suggested by reviewer two (i.e., "time spent with antisocial peers" and "decreased prosocial activities") were not added as the expert panel and focus group had not previously evaluated them. Based on the evaluations by the expert panel, focus group, and peer reviewers, the final version of the ISVPA included 38 items (see Appendix I).

#### Quantitative Analysis of Peer Reviewers' Completion of the ISVPA

To assess time to complete the ISVPA and additional evaluation, all four reviewers completed the ISVPA. For the peer reviewers, the time of completion for the ISVPA ranged from 5 to 23 minutes. Reviewer one had a total frequency subscale score of 27.00 and severity subscale of 22.00. For the frequency construct scores, internalizing problems was 21.00, extreme beliefs 0.00, externalizing behaviors 4.00, and lack of attachment 2.00. For severity construct scores, internalizing problems was 15.00, extreme beliefs 0.00, externalizing behaviors 5.00, and lack of attachment 2.00. Reviewer two had a total frequency subscale score of 14.00 and severity subscale of 12.00. For the frequency construct scores, internalizing problems was 12.00, extreme beliefs 0.00, externalizing behaviors 0.00, and lack of attachment 2.00. For the severity construct scores, internalizing problems was 10.00, extreme beliefs 0.00, externalizing behaviors 0.00, and lack of attachment 2.00. Reviewer three had the highest subscale scores that included a frequency subscale score of 70.00 and severity subscale of 56.00. For frequency construct scores, internalizing problems was 36.00, extreme beliefs 2.00, externalizing behaviors 24.00, and lack of attachment 8.00. For severity construct scores, internalizing problems was 29.00, extreme beliefs 1.00, externalizing behaviors 19.00, and lack of attachment 7.00. Conversely, reviewer four had the lowest subscale ratings, which included a frequency subscale score of 3.00 and

severity subscale score of 0.00. For frequency construct scores, internalizing problems was 3.00, extreme beliefs 0.00, externalizing behaviors 0.00, and lack of attachment 0.00. For severity construct scores, internalizing problems was 0.00, extreme beliefs 0.00, externalizing behaviors 0.00, and lack of attachment 0.00 (see Table 6).

**Table 6**Quantitative Analysis of Peer Reviewer ISVPA Subscale and Construct Scores (N = 4)

Peer	Frequency	Severity	Interna	alizing	Extr	eme	Extern	alizing	Lac	k of
Reviewer			Prob	lems	Bel	iefs	Beha	viors	Attacl	hment
			F	S	F	S	F	S	F	S
One	27.00	22.00	21.00	15.00	0.00	0.00	4.00	5.00	2.00	2.00
Two	14.00	12.00	12.00	10.00	0.00	0.00	0.00	0.00	2.00	2.00
Three	70.00	56.00	36.00	29.00	2.00	1.00	24.00	19.00	8.00	7.00
Four	3.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*Note.* F = frequency; S = severity

## Qualitative Analysis of School Personnel's Evaluation of 38 ISVPA Items

The participants (i.e., school personnel) were sent the final version of the ISVPA (see Appendix I). For the qualitative analysis in the first step, the 27 school personnel's evaluation was reviewed several times to ensure understanding of the evaluation provided. Second, notes were used to indicate the school personnel's demographic information to the corresponding evaluation for context (see Tables 2 and 3). In the third step, two themes emerged based on the school personnel's responses about anonymous students: (a) Similar to Existing ISVPA Items and (b) Additional Responses.

For theme one (i.e., Similar to Existing ISVPA Items), personnel one's statement that the anonymous "student has major anger issues" was similar to item 21 (i.e., loses temper easily) and 29 (i.e., anger outbursts). Personnel two's statement that the anonymous student "threatened to stab someone at school" was similar to 11 (i.e., threat[s] towards other), 27 (i.e., aggressive towards others), and 31 (i.e., leakage). Personnel two stated that the anonymous student "draws

very dark art... showed he was feeling rage because he pressed so hard on the paper," which was related to item 31 (i.e., leakage) and that the anonymous student "sat alone in the field... he did not have or want friends here," which was related to item 20 (i.e., withdrawn) and 26 (i.e., unable to maintain long term relationships). Also, personnel two stated, "he lunged at me when he came back in the building," which relates to item 27 (i.e., aggressive towards others). Finally, personnel two stated, the anonymous student "talked about the ills of society but with a warped concept of oppressed groups in the US. He blamed them for their problems," which relates to item 16 (i.e., extreme beliefs).

For theme two (i.e., Additional Responses), personnel one stated that the anonymous student had "parental encouragement...(of) major anger issues." Although ISVPA items related to anger exist (i.e., item 6 and 30), items related to parents' encouragement of anger were not included. Also, personnel two provided two diagnoses of the anonymous student (i.e., "ADHD diagnosis, dyslexia diagnosis"). No items about a diagnosis were included on the ISVPA. Both personnel three (i.e., "threatened to stab someone at school and was arrested") and seven (i.e., "ended up being incarcerated") referred to arrests and incarceration of the anonymous students, which were not included on the ISVPA. Personnel four (i.e., "grandpa abused him") and five (i.e., "repressive childhood trauma") described the anonymous student's abuse and trauma related experiences. No items regarding abuse or trauma history were included on the ISVPA. Finally, personnel six (i.e., "Baker Act"), eight (i.e., "504 designation with no identified psychological issues"), and nine (i.e., "identified as ED", emotional disturbance) referred to the anonymous students as receiving psychiatric treatment and academic accommodations without the inclusion of psychological considerations as well as being identified with emotional

disturbance in the school setting. No items were similar to the additional responses of participants six, eight, and nine.

The similarities between the personnel's responses and existing ISVPA items supported the inclusion of 8 items (i.e., items 11, 16, 20, 21, 26, 27, 29, and 31) on the ISVPA. Conversely, the nine personnel's responses that were additional and unidentifiable to existing ISVPA items were not included in the ISVPA (see Table 7).

 Table 7

 Qualitative Analysis of Personnel's Evaluation of ISVPA 38 Items (N = 27) 

Participant	Theme One: Similar Response	ISVPA Item(s)	Included/ Not Included	Theme Two: Additional Responses	Included/ Not Included
One	"student has major anger issues"	21, 29	Yes	"parental encouragement(of) major anger issues"	No
Two	"threatened to stab someone at school" "draws very dark art showed he was feeling rage because he pressed so hard on the paper"	11, 27, 31 31	Yes Yes	"ADHD diagnosis, dyslexia diagnosis"	No
	"sat alone in the field he did not have or want friends here"	20, 26	Yes		
	"he lunged at me when he came back in the building"	27	Yes		
	"talked about the ills of society but with a warped concept of oppressed groups in the US. He blamed them for their problems"	16	Yes		
Three	for their problems			"threatened to stab someone at school and was arrested"	No
Four				"grandpa abused him"	No
Five				"repressive childhood trauma"	No
Six				"Baker Act"	No
Seven				"ended up being incarcerated"	No
Eight				"504 designation with no identified psychological issues"	No
Nine				"identified as ED"	No

### **Research Question Two**

What is the dispersion of the participants' ISVPA subscale (i.e., frequency and severity) and construct (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) scores?

#### School Personnel's Descriptive Statistics

Descriptive statistics of a pilot study can be useful for the determination of the power in a larger study. According to Hertzog (2008), "pilot data are sometimes used to estimate a withingroup variance (or standard deviation) to use in power calculations" (p. 187). Standard deviations are specifically important to power analysis calculations in future research, given that the pilot data is representative of the population (Hertzog, 2008). For the present research, sample size calculations supported the use of 27 school personnel with a 75% confidence level and 5% probability level.

Descriptive statistics were calculated for the two ISVPA subscales; frequency, severity as well as the four constructs for frequency and severity; internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment total scores. The frequency subscale had a mean of 54.19, standard deviation of 16.62, and median of 54.00. For the frequency constructs, internalizing problems had a mean of 30.78, standard deviation of 6.10, and median of 31.00. Extreme beliefs had a mean of 1.22, standard deviation of 1.67, and median of 0.00. Externalizing behaviors had a mean of 15.26, standard deviation of 9.74, and median of 12.00. Lack of attachment had a mean of 6.93, standard deviation of 2.56, and median of 7.00. The severity subscale had a mean of 49.93, standard deviation of 17.53, and median of 47.00. For the severity constructs, internalizing problems had a mean of 28.07, standard deviation of 6.77, and median of 28.00. Extreme beliefs had a mean of 1.19, a standard deviation of 1.62, and a median

of 0.00. Externalizing behaviors had a mean of 14.63, a standard deviation of 9.89, and a median of 12.00. Finally, lack of attachment had a mean of 6.04, a standard deviation of 2.47, and a median of 7.00 (see Table 8).

**Table 8**School Personnel's ISVPA 38 Items: Descriptive Statistics (N = 27)

	Items	M	SD	Median
Frequency		54.19	16.62	54.00
<b>Internalizing Problems</b>	1-6, 8, 10, 11, 14, 15, 17, 19-23, 28	30.78	6.10	31.00
Extreme Beliefs	9, 16	1.22	1.67	0.00
Externalizing Behaviors	12, 13, 18, 24, 25, 27, 29-33, 35, 37, 38	15.26	9.74	12.00
Lack of Attachment	7, 26, 34, 36	6.93	2.56	7.00
Severity		49.93	17.53	47.00
<b>Internalizing Problems</b>	1-6, 8, 10, 11, 14, 15, 17, 19-23, 28	28.07	6.77	28.00
Extreme Beliefs	9, 16	1.19	1.62	0.00
Externalizing Behaviors	12, 13, 18, 24, 25, 27, 29-33, 35, 37, 38	14.63	9.89	12.00
Lack of Attachment	7, 26, 34, 36	6.04	2.47	7.00

*Note.* Internalizing Problems = 18 items; Extreme Beliefs = 2; Externalizing Behaviors = 14;

Lack of Attachment = 4

# Range of Subscale and Construct Scores

The range for frequency subscale scores had a minimum of 21.00 and a maximum of 85.00, with the majority of scores between 40.00 and 65.00 (see Table 9, Figure 1). For the constructs, the range for internalizing problems scores had a minimum of 15.00 and a maximum of 40.00, with the majority of scores between 28.00 and 36.00 (see Figure 2). The range for extreme beliefs had a minimum of 0.00 and a maximum of 6.00, with the majority of scores at 0.00 (see Figure 3). The range for externalizing behaviors had a minimum of 1.00 and a maximum of 35.00, with the majority of scores between 10.00 and 20.00 (see Figure 4). The range for lack of attachment had a minimum of 2.00 and a maximum of 10.00, with the majority of scores between 9.00 and 10.00 (see Figure 5).

The range for severity subscale scores had a minimum of 20.00 and a maximum of 81.00, with the majority of scores between 40.00 and 65.00 (see Figure 6). For the constructs, internalizing problems had a minimum of 14.00 and a maximum of 39.00, with majority of scores between 26.00 and 36.00 (see Figure 7). Extreme beliefs had a minimum of 0.00 and a maximum of 6.00, with the majority of scores at 0.00 (see Figure 8). Externalizing behaviors had a minimum of 0.00 and a maximum of 33.00, with the majority of scores between 5.00 and 20.00 (see Figure 9). Finally, lack of attachment had a minimum of 1.00 and a maximum of 10.00, with the majority of scores between 7.00 and 8.00 (see Figure 10).

**Table 9** *Minimum and Maximum of School Personnel Subscale and Construct Scores (N = 27)* 

	Minimum	Maximum
Frequency	21.00	85.00
Internalizing Problems	15.00	40.00
Extreme Beliefs	0.00	6.00
Externalizing Behaviors	1.00	35.00
Lack of Attachment	2.00	10.00
Severity	20.00	81.00
Internalizing Problems	14.00	39.00
Extreme Beliefs	0.00	6.00
Externalizing Behaviors	0.00	33.00
Lack of Attachment	1.00	10.00

Figure 1

Histogram of School Personnel's Frequency Subscale Scores (N = 27)

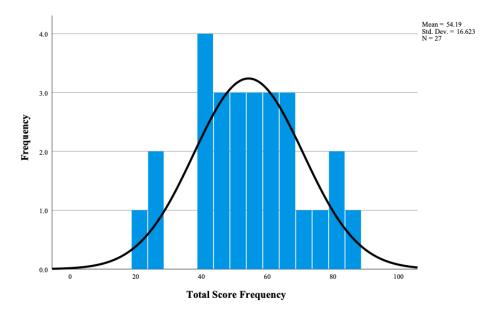


Figure 2  $Histogram\ of\ School\ Personnel's\ Internalizing\ Problems\ Frequency\ Scores\ (N=27)$ 

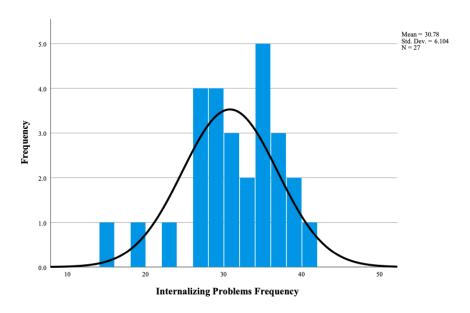


Figure 3

Histogram of School Personnel's Extreme Beliefs Frequency Scores (N = 27)

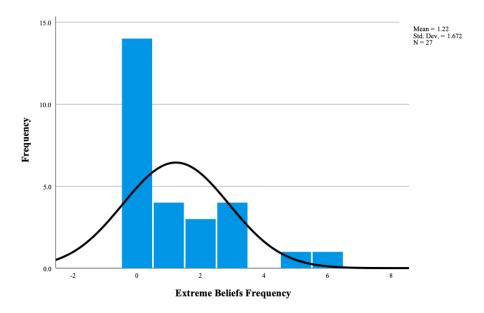
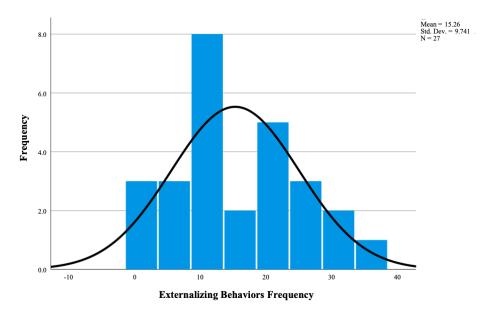


Figure 4  $Histogram\ of\ School\ Personnel's\ Externalizing\ Behaviors\ Frequency\ Scores\ (N=27)$ 



Histogram of School Personnel's Lack of Attachment Frequency Scores (N = 27)

Figure 5

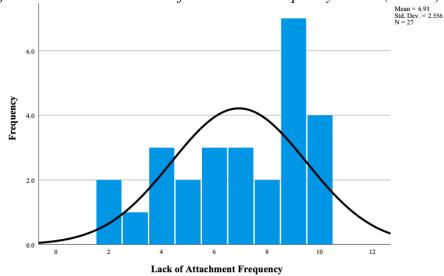


Figure 6  $Histogram\ of\ School\ Personnel's\ Severity\ Subscale\ Scores\ (N=27)$ 

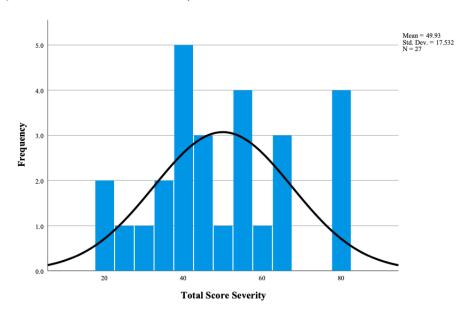


Figure 7 Histogram of School Personnel's Internalizing Problems Severity Scores (N=27)

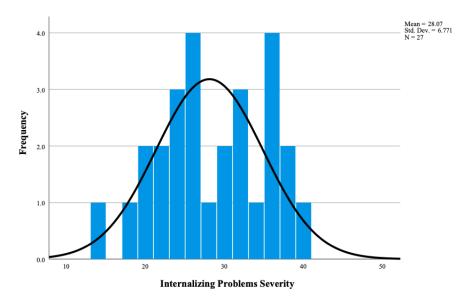


Figure 8

Histogram of School Personnel's Extreme Beliefs Severity Scores (N=27)

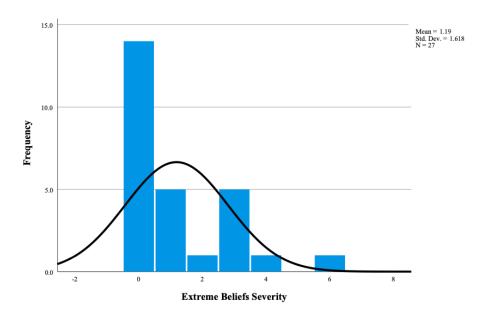


Figure 9  $\label{eq:Histogram} \textit{Histogram of School Personnel's Externalizing Behaviors Severity Scores} \ (N=27)$ 

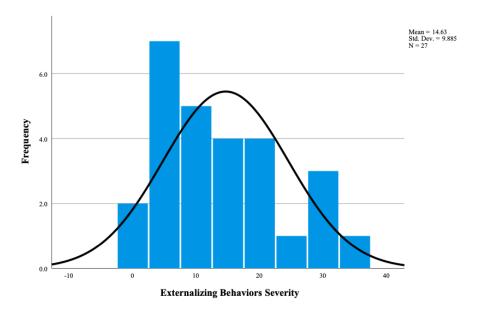
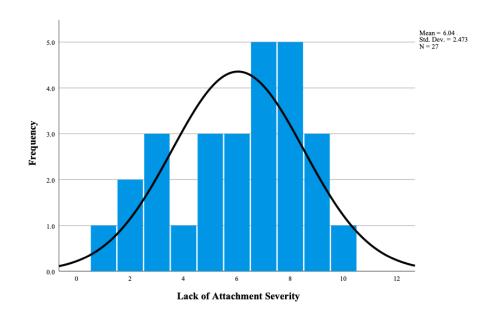


Figure 10

Histogram of School Personnel's Lack of Attachment Severity Scores (N = 27)

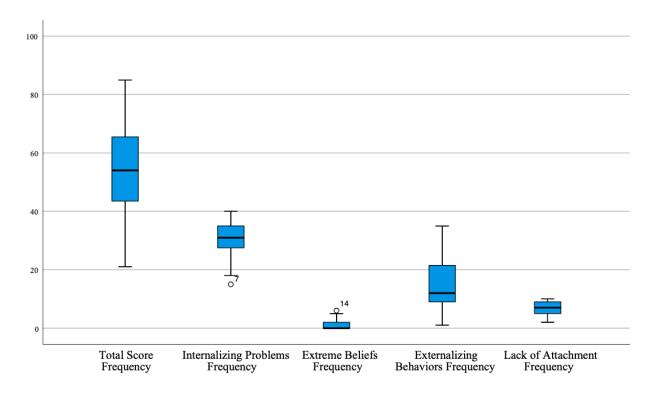


### Box Plots of School Personnel's Subscale and Construct Scores

Box plots were generated to depict the range of the two subscales; frequency and severity as well as the four constructs for frequency and severity; internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment. The box plot for the frequency subscale had a higher distribution when compared to the severity subscale. The construct, internalizing problems had a small distribution of scores and an outlier of 7. Extreme beliefs had a skewed distribution and the lowest distribution of scores when compared to the other three frequency constructs and an outlier of 14. Externalizing behaviors had the larger dispersion of scores when compared to the other three frequency constructs. Lack of attachment had a small distribution that was similar to extreme beliefs; however, the scores were higher when compared to extreme beliefs (see Figure 11).

Figure 11

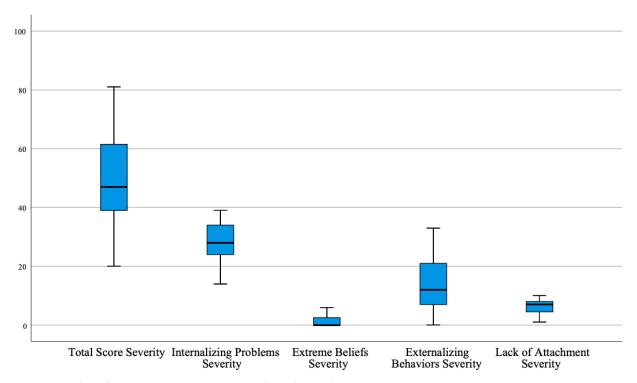
Box Plot of School Personnel's Frequency Subscale and Four Constructs (N = 27)



The box plot for the severity subscale had a slightly lower median score when compared to frequency. The construct internalizing problems had a smaller dispersion of scores and the second highest when compared to the other severity constructs. Extreme beliefs severity had lower dispersion of scores with a very low median. Externalizing behaviors had the largest dispersion of scores when compared to the other constructs plots. Finally, the box plot for lack of attachment had a small dispersion of scores similar to the frequency for lack of attachment (see Figure 12).

Figure 12

Box Plot of School Personnel's Severity Subscale and Four Constructs (N = 27)



Line Graphs of School Personnel's Subscale and Construct Scores

Line graphs were used to identify trends or patterns in the two subscales; frequency, severity and the four constructs for each subscale. The line graph for the frequency subscale had skewed distribution with the downward slope in scores around 40.00 (see Figure 13). The construct internalizing problems indicated two plateaus in scores and a peak at roughly 37.00,

followed by a gradual decline (see Figure 14). Extreme beliefs had a skewed distribution; the scores began with a decreased slope and had low scores compared to the other constructs (see Figure 15). Externalizing behaviors had increased scores at 10.00, followed by a gradual decline (see Figure 16). Finally, lack of attachment frequency was skewed, with most scores less than 8.00, and the graph ended with a steep increase at roughly 9.00 to 10.00 (see Figure 17).

For the severity subscale, the line graph reflected several fluctuations in scores and the highest increase around 40.00 (see Figure 18). For the constructs, internalizing problems had two increased scores at roughly 25.00 and 47.00 (see Figure 19). Extreme beliefs had a skewed distribution as most scores were low for the subscales (see Figure 20). Externalizing behaviors was skewed, with a peak at 5.00 and followed by a gradual decrease (see Figure 21). Finally, lack of attachment was skewed, with a plateau from 7.00 to 9.00, followed by a gradual decrease (see Figure 22).

Figure 13

Line Graph for School Personnel's Frequency Subscale Scores (N = 27)

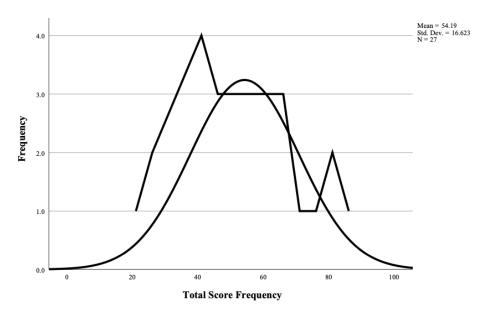


Figure 14

Line Graph for School Personnel's Internalizing Problems Frequency Scores (N = 27)

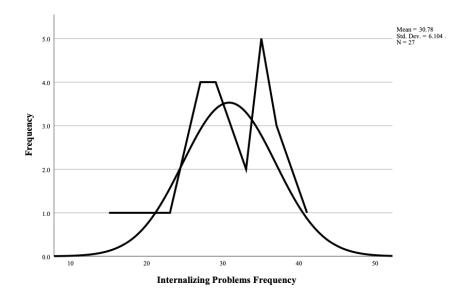


Figure 15

Line Graph for School Personnel's Extreme Beliefs Frequency Scores (N = 27)

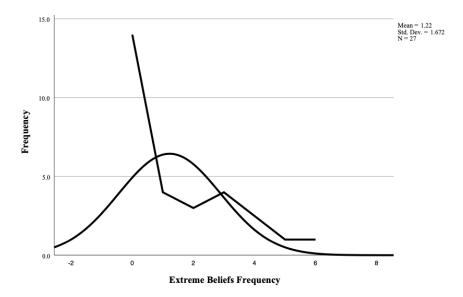


Figure 16

Line Graph for School Personnel's Externalizing Behaviors Frequency Scores (N=27)

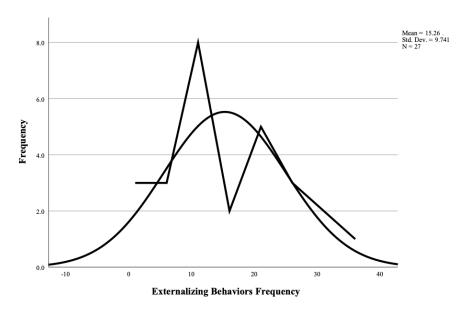


Figure 17

Line Graph for School Personnel's Lack of Attachment Frequency Scores (N = 27)

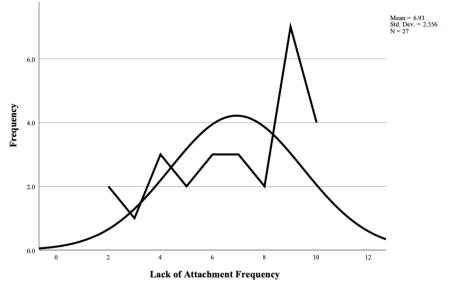


Figure 18

Line Graph for School Personnel's Severity Subscale Scores (N = 27)

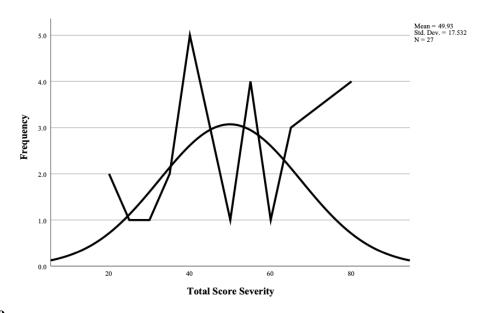


Figure 19

Line Graph for School Personnel's Internalizing Problems Severity Scores (N = 27)

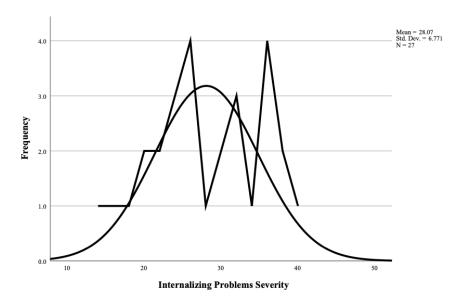


Figure 20 Line Graph for School Personnel's Extreme Beliefs Severity Scores (N=27)

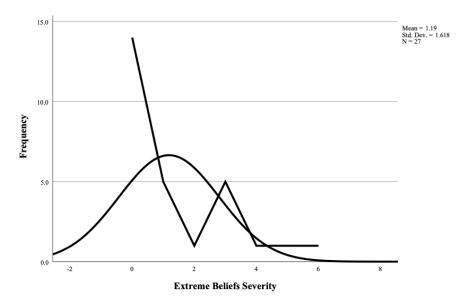


Figure 21

Line Graph for School Personnel's Externalizing Behaviors Severity Scores (N = 27)

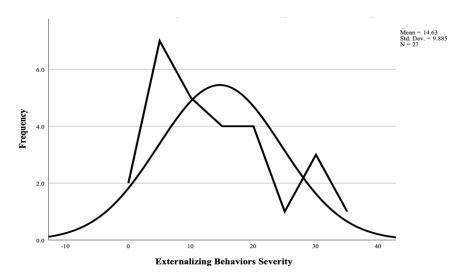
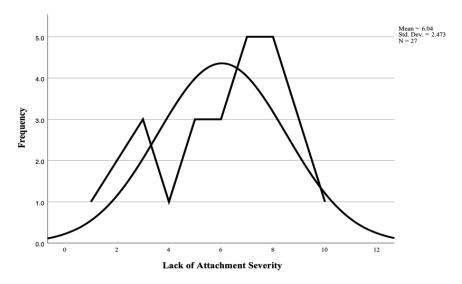


Figure 22

Line Graph for School Personnel's Lack of Attachment Severity Scores (N = 27)



## Tests of Normality

Due to the problems experienced with feasibility (i.e., low response rate and variable adherence to instructions), analyses were calculated to determine the distribution (i.e., standard error of proportion) and normality of the subscales (i.e., frequency and severity) and the four constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) scores. The Kolmogorov-Smirnov (K-S) test for normality is typically used with a N over 50; however, for the present research, the K-S was used as a comparison to the Shapiro-Wilk (S-W). The K-S and the S-W tests of normality were completed for the sample of 27 and subsequently for the sample of 29, the inclusion of the two incomplete responses (i.e., two school personnel did not answer the severity subscale). Results did not indicate a difference when the two school personnel with incomplete responses were included; therefore, a determination was made to maintain the sample of N = 27 for the analyses.

For the K-S test, no significance was found and a normal distribution was indicated for the frequency subscale (i.e., .09, p = .20). For the frequency construct scores, internalizing

problems was nonsignificant and had a normal distribution (i.e., .11, p = .20), whereas the construct extreme beliefs was significant (i.e., .29, p < .001). Externalizing behaviors was not significant and had a normal distribution (i.e., .15, p = .13). Finally, lack of attachment was significant and did not have a normal distribution (i.e., .20, p = .01). The severity subscale was not significant and had a normal distribution (i.e., .10, p = .20) as well as the construct internalizing problems (i.e., .11, p = .20). Conversely, the construct extreme beliefs was significant and did not have a normal distribution (i.e., .29, p < .001). Externalizing behaviors was not significant and had a normal distribution (i.e., .12, p = .20). Finally, lack of attachment was not significant and did have a normal distribution (i.e., .17, p = .04; see Table 10).

The S-W test of normality is recommended for smaller sample sizes (Laerd Statistics, 2018). The S-W test of normality indicated that the frequency subscale scores (i.e., .98, p = .82) and the construct internalizing problems frequency (i.e., .95, p = .20) were not significant; thus, had normal distributions. Extreme beliefs was significant and did not have a normal distribution (i.e., .76, p < .001). Externalizing behaviors (i.e., .95, p = .23) was not significant, thus was normally distributed. Lack of attachment (i.e., .91, p = .02) was not significant and normally distributed. The S-W test of normality indicated that the severity subscale scores (i.e., .96, p = .36) and the construct internalizing problems (i.e., .97, p = .53) were not significant; thus, had normal distributions. Extreme beliefs (i.e., .75, p < .001) was significant, thus not normally distributed. Externalizing behaviors (i.e., .93, p = .08) was not significant, thus was normally distributed. Lack of attachment (i.e., .94, p = .13) was not significant and normally distributed.

Also, skewness statistics indicated a small non-significant, negative skew of -.09 for frequency subscale. For the constructs, internalizing problems was negatively skewed at -.82. Extreme beliefs was positively skewed at 1.43 and externalizing behaviors was positively

skewed at .39. Finally, lack of attachment was negatively skewed at -.52. Skewness statistics indicated a small positive skew for the severity subscale of .22. For the constructs, internalizing problems had a negative skew of -.22 and extreme beliefs had a skew of 1.38. Externalizing behaviors was positively skewed at .53. Finally, lack of attachment had a negative skew at -.47 (see Table 10).

**Table 10**Tests of Normality Distribution of School Personnel's Scores (N = 27)

	Kolmogoro	v-Smirnov	Shapii	o-Wilk	Skewness
Total Scores	Statistic	p	Statistic	р	Statistic
Frequency	.09	.20	.98	.82	09
<b>Internalizing Problems</b>	.11	.20	.95	.20	82
Extreme Beliefs	.29	<.001*	.76	<.001*	1.43
<b>Externalizing Behaviors</b>	.15	.13	.95	.23	.39
Lack of Attachment	.20	.01*	.91	.02	52
Severity	.10	.20	.96	.36	.22
<b>Internalizing Problems</b>	.11	.20	.97	.53	22
Extreme Beliefs	.29	<.001*	.75	<.001*	1.38
<b>Externalizing Behaviors</b>	.12	.20	.93	.08	.53
Lack of Attachment	.17	.04	.94	.13	47

*Note.* \*p < .01

#### **Confidence Intervals**

According to Hertzog (2008), "given the size limitations and exploratory nature of a pilot study, conventional 95% confidence intervals may be unrealistically stringent" and recommendations were to use 90% and 68% confidence intervals (CI), "...with interpretation focusing on the most liberal level" (p. 181). For example, Hertzog (2008) indicated that "in a pilot study with 20 participants, we can be 68% confident that our estimate is accurate within 8 percentage points" (p. 181). Based on Viechtbauer et al.'s (2015) and Hertzog's (2008) recommendations, 75% and 90% CIs were used for the present research. On the 52 responses received, with a dropout rate of 48.08% (23 unanswered, 44.23%; 2 incompletes, 3.85%), the CIs

should be less stringent. For the present research, a 75% confidence level and 5% probability are within the recommended confidence levels outlined by Hertzog (2008).

Using a 75% CI, the frequency subscale had a lower CI of 50.42 and an upper of 57.95.

Using a 90% CI, the lower CI was 48.73 and the upper was 59.64. Using a 75% CI, the construct internalizing problems had a lower CI of 29.40 and an upper of 32.16. Using a 90% CI, the lower CI was 28.77 and the upper was 32.78. Using a 75% CI, the construct extreme beliefs had a lower CI of .84 and an upper of 1.60. Using a 90% CI, the lower CI was .67 and the upper was 1.77. Using a 75% CI, the construct externalizing behaviors had a lower CI of 13.05 and an upper of 17.47. Using a 90% CI, the lower CI was 12.06 and the upper was 18.46. Using a 75% CI, the construct lack of attachment had a lower CI of 6.35 and an upper of 7.50. Using a 90% CI, the lower CI was 6.09 and the upper was 7.76.

Using a 75% CI, the severity subscale had a lower CI of 45.96 and an upper of 53.90.

Using a 90% CI, the lower CI was 44.17 and the upper was 55.68. Using a 75% CI, the construct internalizing problems had a lower CI of 26.54 and an upper of 29.61. Using a 90% CI, the lower CI was 25.85 and the upper was 30.30. Using a 75% CI, the construct extreme beliefs had a lower CI of .82 and an upper of 1.55. Using a 90% CI, the lower CI was .65 and the upper was 1.72. Using a 75% CI, the construct externalizing behaviors had a lower CI of 12.39 and an upper of 16.87. Using a 90% CI, the lower CI was 11.39 and the upper was 17.87. Using a 75% CI, the construct lack of attachment had a lower CI of 5.48 and an upper of 6.60. Using a 90% CI, the lower CI was 5.23 and the upper was 6.85 (see Table 11).

**Table 11**Confidence Intervals of School Personnel's ISVPA Subscale and Construct Scores (N = 27)

	Items	75%	6 CI	90%	6 CI
		LL	UL	LL	UL
Frequency		50.42	57.95	48.73	59.64
<b>Internalizing Problems</b>	1-6, 8, 10, 11, 14, 15, 17, 19-23, 28	29.40	32.16	28.77	32.78
Extreme Beliefs	9, 16	.84	1.60	.67	1.77
Externalizing Behaviors	12, 13, 18, 24, 25, 27, 29-33, 35, 37, 38	13.05	17.47	12.06	18.46
Lack of Attachment	7, 26, 34, 36	6.35	7.50	6.09	7.76
Severity		45.96	53.90	44.17	55.68
<b>Internalizing Problems</b>	1-6, 8, 10, 11, 14, 15, 17, 19-23, 28	26.54	29.61	25.85	30.30
Extreme Beliefs	9,16	.82	1.55	.65	1.72
Externalizing Behaviors	12, 13, 18, 24, 25, 27, 29-33, 35, 37, 38	12.39	16.87	11.39	17.87
Lack of Attachment	7, 26, 34, 36	5.48	6.60	5.23	6.85

*Note.* CI = confidence interval; <math>LL = lower limit; UL = upper limit

## **Adequacy and Planned Research Data Analysis**

Based on Hertzog's (2008) recommendation for adequacy of item performance and continued research using the ISVPA, two research questions were used.

#### **Research Question Three**

What is the relationship between the participants' ISVPA subscale (i.e., frequency and severity) and construct (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) scores?

#### School Personnel's ISVPA Subscale and Construct Scores

In the present research, correlations were calculated for school personnel's subscale and the four construct scores. As recommended by Hertzog (2008), correlations were calculated to assess the overall reliability of the ISVPA. For the present research, nonparametric correlational analyses were used (i.e., Kendall's tau-b) rather than internal consistency (i.e., Cronbach's alpha) as relevant research indicated a small sample may be insufficient to run a parametric analysis (Hertzog, 2008). In the present research, Donovan's (2016) correlational strength estimates of

effect size were used (i.e., r = .10 to .49, weak; r = .50 to .69, moderate; r = .70 to .89, strong; and r = .90 to 1.00, very strong).

**Frequency and Severity Subscales.** A strong and significant correlation was indicated for the two subscales; frequency and severity ( $r_{\tau} = .88$ , p < .001).

**Internalizing Problems**. For the frequency of internalizing problems and the frequency subscale, a moderate and significant relationship was indicated ( $r_{\tau} = .57$ , p < .001). For the frequency of internalizing problems and the severity subscale, a moderate and significant relationship was indicated ( $r_{\tau} = .61$ , p < .001).

For the severity of internalizing problems and the frequency subscale, a moderate and significant relationship was indicated ( $r_{\tau}$  = .56, p < .001). For the severity of internalizing problems and the severity subscale, a moderate and significant relationship was indicated ( $r_{\tau}$  = .65, p < .001). For the severity of internalizing problems and the frequency of internalizing problems, a strong and significant relationship was indicated ( $r_{\tau}$  = .84, p < .001).

**Extreme Beliefs.** For the frequency of extreme beliefs and the frequency subscale, a moderate and significant correlation was indicated ( $r_{\tau}$  = .54, p < .001). For the frequency of extreme beliefs and the severity subscale, a moderate and significant correlation was indicated ( $r_{\tau}$  = .48, p = .00). For the frequency of extreme beliefs and the frequency of internalizing problems, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .33, p = .03). For the frequency of extreme beliefs and severity of internalizing problems, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .24, p = .12).

For the severity of extreme beliefs and the frequency subscale, a moderate and significant correlation was indicated ( $r_{\tau} = .51$ , p < .001). For the severity of extreme beliefs and the severity subscale, a weak and significant correlation was indicated ( $r_{\tau} = .48$ , p = .00). For the severity of

extreme beliefs and the frequency of internalizing problems, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .29, p = .06). For severity of extreme beliefs and the severity of internalizing problems, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .23, p = .13). For the severity of extreme beliefs and the frequency of extreme beliefs, a very strong and significant relationship was indicated ( $r_{\tau}$  = .95, p < .001).

**Externalizing Behaviors.** For the frequency of externalizing behaviors and the frequency subscale, a strong and significant correlation was indicated ( $r_{\tau}$  = .81, p < .001). For the frequency of externalizing behaviors and the severity subscale, a strong and significant correlation was indicated ( $r_{\tau}$  = .80, p < .001). For the frequency of externalizing behaviors and the frequency of internalizing problems, a weak and significant relationship was indicated ( $r_{\tau}$  = .44, p = .00). For the frequency of externalizing behaviors and the severity of internalizing problems, a weak and significant relationship was indicated ( $r_{\tau}$  = .46, p < .001). For the frequency of externalizing behaviors and the frequency of extreme beliefs, a moderate and significant relationship was indicated ( $r_{\tau}$  = .50, p = .00). For the frequency of externalizing behaviors and the severity of extreme beliefs, a moderate and significant relationship was indicated ( $r_{\tau}$  = .50, p = .00).

For the severity of externalizing behaviors and the frequency subscale, a strong and significant correlation was indicated ( $r_{\tau}$  = .75, p < .001). For the severity of externalizing behaviors and the severity subscale, a strong and significant correlation was indicated ( $r_{\tau}$  = .75, p < .001). For the severity of externalizing behaviors and the frequency of internalizing problems, a weak and significant relationship was indicated ( $r_{\tau}$  = .37, p = .01). For the severity of externalizing behaviors and the severity of internalizing problems, a weak and significant relationship was indicated ( $r_{\tau}$  = .42, p = .00). For the severity of externalizing behaviors and the

frequency of extreme beliefs, a moderate and significant relationship was indicated ( $r_{\tau}$  = .51, p < .001). For the severity of externalizing behaviors and the severity of extreme beliefs, a moderate and significant relationship was indicated ( $r_{\tau}$  = .51, p < .001). For the severity of externalizing behaviors and the frequency of externalizing behaviors, a very strong and significant relationship was indicated ( $r_{\tau}$  = .92, p < .001).

**Lack of Attachment.** For the frequency of lack of attachment and the frequency of subscale, a moderate and significant correlation was indicated ( $r_{\tau}$  = .57, p < .001). For the frequency of lack of attachment and the severity subscale, a weak and significant correlation was indicated ( $r_{\tau}$  = .49, p < .001). For the frequency of lack of attachment and the frequency of internalizing problems, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .36, p = .01). For the frequency of lack of attachment and the severity of internalizing problems, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .27, p = .06). For the frequency of lack of attachment and the frequency of extreme beliefs, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .32, p = .04). For the frequency of lack of attachment and the severity of extreme beliefs, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .32, p = .05). For the frequency of lack of attachment and the frequency of externalizing behaviors, a weak and significant relationship was indicated ( $r_{\tau}$  = .45, p = .00). For the frequency of lack of attachment and the severity of externalizing behaviors, a weak and significant relationship was indicated ( $r_{\tau}$  = .41, p = .00).

For the severity of lack of attachment and the frequency subscale, a moderate and significant correlation was indicated ( $r_{\tau}$  = .61, p < .001). For the severity of lack of attachment and the severity subscale, a moderate and significant correlation was indicated ( $r_{\tau}$  = .58, p < .001). For the severity of lack of attachment and the frequency of internalizing problems, a weak

and significant relationship was indicated ( $r_{\tau}$  = .44, p = .00). For the severity of lack of attachment and the severity of internalizing problems, a weak and significant relationship was indicated ( $r_{\tau}$  = .46, p = .00). For the severity of lack of attachment and the frequency of extreme beliefs, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .42, p = .16). For the severity of lack of attachment and the severity of extreme beliefs, a weak and nonsignificant relationship was indicated ( $r_{\tau}$  = .21, p = .18). For the severity of lack of attachment and the frequency of externalizing behaviors, a weak and significant relationship was indicated ( $r_{\tau}$  = .49, p < .001). For the severity of lack of attachment and the severity of externalizing behaviors, a weak and significant relationship was indicated ( $r_{\tau}$  = .44, p = .00). For the severity of lack of attachment and the frequency of lack of attachment, a moderate and significant relationship was indicated ( $r_{\tau}$  = .69, p < .001; see Table 12).

Table 12  $School\ Personnel\ ISVPA\ Subscale\ and\ Construct\ Correlations\ (N=27)$ 

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Frequency	-									
2. Severity	.88*	-								
3. Internalizing Problems Frequency	.57*	.61*	-							
4. Internalizing Problems Severity	.56*	.65*	.84*	-						
5. Extreme Beliefs Frequency	.54*	.48*	.33	.24	-					
6. Extreme Beliefs Severity	.51*	.48*	.29	.23	.95*	-				
7. Externalizing Behaviors Frequency	.81*	.80*	.44*	.46*	.50*	.50*	-			
8. Externalizing Behaviors Severity	.75*	.75*	.37*	.42*	.51*	.51*	.92*	-		
9. Lack of Attachment Frequency	.57*	.49*	.36	.27	.32	.32	.45*	.41*	-	
10. Lack of Attachment Severity	.61*	.58*	.44*	.46*	.42	.21	.49*	.44*	.69*	-

*Note.* \*p < .01

## **Research Question Four**

What are the inter-item relationships between the 38 items on the ISVPA?

#### ISVPA Inter-Item Correlations

Inter-item correlations are used to assess a construct that is important in instrument development and to ensure that the items and latent variables are accurately measured. In the present research, Kendall's tau-b was used to assess the ISVPA inter-item correlations. The level of strength was based on r = .10 to .49, weak; r = .50 to .69, moderate; r = .70 to .89, strong; and r = .90 to 1.00, very strong (Donovan, 2016).

For the frequency subscale, there was a total of 703 correlations, with 24 items that correlated moderately or strongly with at least one other item on that subscale at a .01 level. For the very strong level, no inter-item correlations were related or significant. For the strong level, 16 inter-item correlations were related and significant (p < .01, see Table 13). For the moderate level, 64 inter-item correlations were related and significant (p < .01, see Table 14). A total of 623 inter-item correlations were at the weak level, 14 correlations were significant (p < .01) and 609 were not significant.

For the severity subscale, there was a total of 703 correlations, with 27 items that correlated moderately or strongly with at least one other item on that subscale at a .01 level. For the very strong level, no inter-item correlations were related or significant. For the strong level, 20 inter-item correlations were related and significant (p < .01, see Table 15). For the moderate level, 62 inter-item correlations were related and significant (p < .01, see Table 16). A total of 621 inter-item correlations were at the weak level, 26 correlations were significant (p < .01), and 595 were not significant.

Table 13  $School\ Personnel\ ISVPA\ 16\ Frequency\ Constructs\ Inter-Item\ Strong\ Correlations\ (N=27)$ 

Items	6. IP	11. IP	21. IP	24. EX	27. EX	29. EX	30. EX
16. EB		.74*					
21. IP	.77*						
27. EX				.80*			
29. EX	.76*		.73*	.72*	.72*		
30. EX	.73*		.80*			.83*	
32. EX				.72*	.72*	.84*	.73*
33. EX						.77*	.85*

Note. IP = Internalizing Problems, EB = Extreme Beliefs, EX = Externalizing Behaviors, LA = Lack of Attachment; \*p < .01

 Table 14

 School Personnel ISVPA 64 Frequency Constructs Inter-Item Moderate Correlations (N = 27) 

Items	2. IP	6. IP	9. EB	10. IP	11. IP	12. EX	13. EX	15. IP	16. EB	19. IP	21. IP	24. EX	25. EX	26. LA	27. EX	29. EX	30. EX	32. EX	33. EX	37. EX
5. IP	.50*																			
10. IP		.54*																		
11. IP		.51*		.56*																
12. EX			.57*		.51*															
13. EX				.62*	.56*	.62*														
15. IP		51*																		
16. EB				.54*		.60*	.65*													
21. IP					.53*			57*												
24. EX		.61*			.58*				.51*		.55*									

Items	2. IP	6. IP	9. EB	10. IP	11. IP	12. EX	13. EX	15. IP	16. EB	19. IP	21. IP	24. EX	25. EX	26. LA	27. EX	29. EX	30. EX	32. EX	33. EX	37. EX
25. EX		.50*									.54*	.55*								
26. LA					.60*				.53*											
27. EX		.63*			.65*		.53*		.62*		.64*		.50*							
29. EX					.60*								.65*							
30. EX					.52*							.60*	.69*		.57*					
31. EX					.53*	.60*	.67*		.56*					.56*						
32. EX		.67*			.57*						.60*		.57*							
33. EX		.62*			.56*					.63*	.60*	.56*	.64*		.52*			.69*		
36. LA											.58*					.52*	.68*		.69*	
37. EX												.61*	.52*		.55*	.50*		.52*		
38. EX					.50*															.56*

 $\overline{Note}$ . IP = Internalizing Problems, EB = Extreme Beliefs, EX = Externalizing Behaviors, LA = Lack of Attachment; \*p < .01

Table 15  $School\ Personnel\ 20\ ISVPA\ Severity\ Constructs\ Inter-Item\ Strong\ Correlations\ (N=27)$ 

Items	6. IP	11. IP	21. IP	24. EX	25. EX	27. EX	29. EX	30. EX	32. EX
16. EB		.81*							_
21. IP	.73*								
27. EX				.78*					
29. EX	.70*		.71*	.73*	.70*	.81*			
30. EX			.70*			.71*	.83*		
32. EX	.72*			.77*		.79*	.76*	.72*	
33. EX	.71*						.71*	.82*	.72*

Note. IP = Internalizing Problems, EB = Extreme Beliefs, EX = Externalizing Behaviors, LA = Lack of Attachment; \*p < .01

 Table 16

 School Personnel ISVPA 62 Severity Constructs Inter-Item Moderate Correlations (N = 27) 

	1.	3.	5.	6.	9.	10.	11.	12.	13.	15.	16.	19.	20.	21.	24.	25.	27.	29.	30.	32.	33.	37.
Items	IΡ	IP	IP	IP	EB	IΡ	IP	EX	EX	IP	EB	IP	IP	IP	EX							
3. IP	.54*																					
8. IP		.52*																				
10. IP				.59*																		
11. IP				.55*		.65*																
12. EX					.51*																	
13. EX						.66*	.58*	.65*														
16. EB						.59*		.61*	.65*													
17. IP			.50*																			
21. IP							.51*			57*												

Items	1. IP	3. IP	5. IP	6. IP	9. EB	10. IP	11. IP	12. EX	13. EX	15. IP	16. EB	19. IP	20. IP	21. IP	24. EX	25. EX	27. EX	29. EX	30. EX	32. EX	33. EX	37. EX
24. EX				.65*	LB	- 11	.59*	LA	LA	н	LD		<u> </u>	.51*	LIX	LIX	LA	Lix	LIX	Lix	Lix	Lit
25. EX				.62*		.55*	.55*							.55*	.55*							
27. EX				.64*		.55*	.64*				.56*			.65*		.59*						
29. EX							.57*															
30. EX				.63*		.50*	.57*				.51*					.68*						
31. EX								.52*	.64*				.54*									
32. EX							.50*							.68*		.59*						
33. EX						.51*						.55*		.65*	.66*	.64*	.59*					
36. LA														.63*				.58*	.62*		.56*	
37. EX						.55*	.52*							.53*	.56*	.62*	.60*	.66*	.59*	.54*		
38. EX				ED E				11.1. 70.1											.52*			.63*

Note. IP = Internalizing Problems, EB = Extreme Beliefs, EX = Externalizing Behaviors, LA = Lack of Attachment; \*p < .01

## **Summary**

In this chapter, descriptions of the expert panel, focus group, peer reviewers, and school personnel as well as the three data collection phases were provided. Additionally, the data analysis for feasibility of the present research that included two of the four revised research questions were provided. Both the evaluators' and school personnel's qualitative and quantitative evaluations, as well as the descriptive statistics, graphs, tests of normality, and confidence intervals were included. Finally, data analysis for the adequacy that included the two additional research questions and the correlational analyses were provided.

### Chapter V

#### Introduction

Chapter V begins with a discussion of the present research findings. Next, the implications for school personnel are provided, followed by the limitations of the present research and the recommendations for future research. Finally, the conclusions are provided.

## **Discussion of Research Findings**

The purpose of the present research was to develop an interdisciplinary school violence prevention assessment that examines the frequency and severity of four constructs (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment), the ISVPA. Ideally, the ISVPA is to be used in conjunction with existing threat assessment procedures for students who have expressed a threat. Details of the ISVPA in conjunction with existing threat assessment procedures could give background context (i.e., last 30 days) to possible problematic patterns a student is experiencing. As indicated by experts in the present research, risk assessments are not supported for the evaluation of school violence because of the chance students' will be profiled or wrongfully identified from bias. As most threat assessments are qualitative in nature, the ISVPA can provide additional information and serve as an extra assessment measure to school violence prevention.

#### **ISVPA Validity**

In the present research, face and content validity were assessed through the utilization of three types of evaluations; expert panel, focus group, and peer reviewers. The utilization of these three types of evaluations provides feedback and information that is pertinent to the instrument development process (Crocker & Aligina, 2008; DeVellis, 2017; Fernández-Gómez et al., 2020).

## Expert Panel

The utilization of an expert panel is widely supported in an instrument development (Crocker & Aligina, 2008; DeVellis, 2017; Stancliffe et al., 2017; Stolarova et al., 2014) and can be utilized to assess for overall face and content validity (Crocker & Aligina, 2008; DeVellis, 2017). According to Fernández-Gómez et al. (2020), an expert panel is beneficial for the identification of strengths and weaknesses of an instrument that should include both qualitative and quantitative evaluations. In the present research, six experts from the professional fields of counseling, psychology, criminology, and sociology evaluated the 67 ISVPA items for face and content validity. As indicated by Fernández-Gómez et al. (2020), the strength of experts' agreement (e.g., six experts identifying the same construct for an item) supports content validity of an instrument. The results of the qualitative and quantitative evaluation by the experts in the field of school violence indicated suggestions for revisions (i.e., constructs and items, 67 to 41 items). Due to the experts' multiple revision suggestions and reduction in items based on the four major constructs, further research is needed on the ISVPA's face and content validity.

### Focus Group

Face and content validity was further analyzed through the utilization of a focus group of school personnel (i.e., teachers and principals). According to Benson and Clark (1982), an evaluation by a target group (i.e., the intended population to use an instrument) could contribute to the validation process of an instrument. Similarly, to the expert panel phase and as suggested by Fernández-Gómez et al. (2020), three or more focus group members agreed whether an item was clear confirming validity of ISVPA items. The benefit of the focus group was to ensure that the language of items was clear and easy to understand by teachers and principals, who are among the intended population (i.e., three additional items were deleted).

Based on the expert panel and focus group, 18 items were identified in the construct of internalizing problems, the most items in one construct when compared to the other three constructs. Conversely, only two items were identified for extreme beliefs, which was the lowest number of items in a construct when compared to the other three constructs. Also, 14 items were identified for externalizing behaviors, the second highest number of items in a construct. Finally, four items were indicated for the lack of attachment construct, similar to the small number of items for extreme beliefs. The qualitative and quantitative evaluations by the expert panel and focus group added face and content validity to the 38 items included in the ISVPA.

#### Peer Review Group

The recommendation by Benson and Clark (1982) supported the inclusion of peer reviewers to assess content validity of an instrument. In the present research, peer reviewers provided a counseling perspective of the ISVPA, a representation of the target professional population (i.e., school personnel). Additional face and content validity were supported by the peer reviewers' qualitative evaluation, as three of the four reviewers provided positive feedback to the overall ISVPA construction. Additionally, the peer reviewers' further clarification of items with their examples provided content validity. Peer reviewers' completion of the ISVPA assisted in the validation of the overall administration and identification of possible issues. Peer reviewers' scores on the ISVPA aligned with relevant research by identifying internalizing problems and externalizing behaviors as important factors to consider in adolescent psychopathology (Achenbach & Edlebrock, 1979; Miller & Eisenberg, 1988) and are especially important in school-based research.

The results of the evaluations completed by the expert panel, focus group, and peer review group yielded similar recommendations for improvement. Both the expert panel's and

peer review group's qualitative evaluations supported several recommendations for revisions to existing items or suggestions for new items to be added to the ISVPA. Although content validity from the separate evaluations was limited, a marginal increase in face and content validity was observed as all of the evaluations were compared. For example, the overlap of items between the expert panel and focus group both contributed to item clarity that further solidified the positive feedback from the peer reviewers. Overall, the utilization of the expert panel, focus group, and peer reviewers were a significant benefit to the instrument development process and indications for future research with the ISVPA.

#### **ISVPA** Reliability

In the present research, reliability was assessed with the ISVPA. The small sample of school personnel (i.e., N = 27) demographics were similar to the trends seen in the education and school counseling field research (ASCA, 2021; National Center for Education Statistics, 2022; Schaeffer, 2021). According to Schaeffer (2021), in 2017 to 2018, 79% of teachers were White, 7% Black/African American, 9% Latino/Hispanic, 2% Asian American, and less than 2% American Indian/Alaskan Native or Pacific Islander. In the present research, teachers were mostly female (i.e., four female and one male) who all identified as White (18.50%). From 2017 to 2018, the National Center for Education Statistics (2022) found that 78% of principals were White, 11% Black/African American, 9% Latino/Hispanic, 1% Asian American, and 1% American Indian/Alaskan Native. In the present research, of the four female principals, two were White (7.40%) and two were Black/African American (7.40%).

Based on the ASCA Research Report: State of the Profession 2020, 77% of school counselors were White, 10% Black/African American, 5% Latino/Hispanic, roughly 1% Asian American, and less than 1% American Indian/Alaskan Native or Pacific Islander. In the present

research, of the 18 school counselors (i.e., 2 male, 14 female, and 2 no response) 13 reported White (48.20%), 2 Black/African American (7.40%), 1 Latino/Hispanic (3.70%), and 2 no response (7.40%). The similarities between the demographic trends and the present research with both teachers and principals as well as school counselors indicates that the participants were representative of the target population that contributed to the validity and reliability of their evaluations of middle school students.

## Frequency Subscale

In the present research, on average, school personnel's evaluation of how frequent students' concerns (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) were at a moderate level (M = 54.19), with the lowest score at 21.00, a low concern and the highest score at 85.00, a high concern. A moderate level of concern indicates how often a students' concerns are occurring and that an opportunity for intervention is needed prior to the escalation of violence (Reddy et al., 2001). As suggested by Vossekuil et al. (2002), consultation with others, like members of the multidisciplinary threat assessment team, law enforcement, school administration, and colleagues (i.e., mental health professionals or physicians) who specialize in the assessment of violence are encouraged. Despite a resulting level of concern for a student (i.e., low, moderate, or high), school personnel's consultation and clinical judgment should be considered to ensure that their assessment of a student is thoroughly analyzed regardless of the level of concern. The resulting level of concern for the ISVPA should not be used as the sole assessment in the threat assessment procedures.

Frequency Subscale and Frequency Construct Correlations. Geschwind et al. (2019) noted how often or severe externalizing changes in behaviors or internalizing problems occur can be related to factors, such as internal depression, withdrawal, and shyness. Based on the

evaluation of school personnel in the present research, five strong and moderate correlations were found. A strong and significant correlation was found for the frequency subscale and students' frequency of their externalizing behaviors ( $r_{\tau} = .81$ ). Also, the frequency subscale was moderately and significantly correlated with the frequency of students' internalizing problems, extreme beliefs, and lack of attachment ( $r_{\tau} = .57$ , .54, .57). The frequency of students' externalizing behaviors was moderately and significantly correlated with the frequency of their extreme beliefs ( $r_{\tau} = .50$ ).

Hirschi (1969) suggested that factors such as lack of attachment and extreme beliefs can contribute to adolescents' delinquent behaviors. In the present research, five weak correlations were found. The frequency of students' externalizing behaviors weakly but significantly correlated with the frequency of their lack of attachment ( $r_{\tau}$  = .45). Students' frequency of internalizing problems was weakly and significantly correlated with the frequency of their externalizing behaviors ( $r_{\tau}$  = .44). Conversely, weak and nonsignificant correlations were found with the frequency of students' internalizing problems with the frequency of their extreme beliefs and lack of attachment ( $r_{\tau}$  = .33, .36). Finally, a weak and nonsignificant correlation was found with the frequency of students' lack of attachment and their extreme beliefs ( $r_{\tau}$  = .32).

Frequency Subscale and Severity Construct Correlations. Based on the evaluations of school personnel, three strong and moderate correlations with the frequency subscale were also found with the severity of the constructs (i.e., internalizing problems, extreme beliefs, and externalizing behaviors). As indicated by O'Toole (2000), the severity of students' concerns related to violence and their externalizing behaviors can be related. Strong and significant relationships were found with the frequency of students' externalizing behaviors and the severity subscale ( $r_{\tau} = .80$ ). Also, the frequency of students' internalizing problems moderately and

significantly correlated with the severity subscale ( $r_{\tau}$  = .61). A moderate and significant correlation was found with the frequency of students' externalizing behaviors and the severity of their extreme beliefs ( $r_{\tau}$  = .50).

Hirschi (1969), a prominent figure in criminology and sociology fields, identified the importance of strong bonds in adolescents' moral belief system and their attachment to others in the prevention of delinquent behaviors. In the present research, seven weak correlations were found. Weak but significant correlations were found for the frequency of students' extreme beliefs and their lack of attachment with the severity subscale ( $r_{\tau} = .48$ , .49). A weak and significant correlation was found for the frequency of students' externalizing behaviors and the severity of their internalizing problems ( $r_{\tau} = .46$ ). A weak and significant correlation was found for the frequency of students' lack of attachment and the severity of their externalizing behaviors ( $r_{\tau} = .41$ ). Weak and nonsignificant correlations were found for the frequency of students' extreme beliefs and their lack of attachment with the severity of their internalizing problems ( $r_{\tau} = .24$ , .27). Finally, a weak and nonsignificant correlation was found for the frequency of students' lack of attachment and the severity of their extreme beliefs ( $r_{\tau} = .32$ ).

Frequency Inter-Item Correlations. According to Burton and Mazerolle (2011), interitem correlations should be at least moderately correlated to exhibit reliability. Less than one quarter of the inter-item correlations for frequency were strong and significant ( $r_{\tau} = .72 - .85$ ). However, almost two thirds of the significant inter-item correlations for the frequency of students' concerns (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) were moderate ( $r_{\tau} = .50 - .69$ ). In the present research, a little over 65% (i.e., 24) of items significantly correlated (i.e., moderately and strongly) with at least one other item on the subscale for the frequency of students' internalizing problems, extreme beliefs,

externalizing behaviors, and lack of attachment ( $r_{\tau}$  = .50 - .85), resulting in reliability of the frequency subscale. Conversely, 14 inter-item correlations were significant at a weak level, thus did not support reliability ( $r_{\tau}$  = .45 - .49).

## Severity Subscale

In the present research, on average, school personnel's evaluation of how severe students' concerns (i.e., internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment) were at a moderate level (M = 49.93). Compared to the frequency of students' concerns (M = 54.19), the severity of their concerns was slightly lower (M = 49.93), with the lowest score of 20.00, a low level of concern and the highest score of 81.00, a high level of concern. As in the frequency of students' concerns that were at a moderate level, the average of severity of students' concerns was also at a moderate level as well as at a low and high level of concern. Middle school students experienced or demonstrated concerns slightly more than the severity of their concerns. As previously noted by Vossekuil et al. (2002), consultation with others is encouraged in the assessment of a threat. For moderate level concerns, clinical judgment and consultation should be considered when assessing a student to ensure that the personnel's assessment is thoroughly analyzed, despite the resulting level of concern.

Severity Subscale and Severity Construct Correlations. As indicated by O'Toole (2000), the severity of students' concerns occurs when they express more details of a threat (e.g., plans of violence) and when issues are identified in their background (i.e., student's personality, family, school, and peer dynamics). In the present research, four strong and moderate correlations were found. The severity subscale and four construct correlations for students' concerns varied from strong to weak and significant. Strong and significant correlations were found with the severity subscale and the severity of students' externalizing behaviors ( $r_{\tau} = .75$ ).

The severity subscale moderately and significantly correlated with the severity of students' internalizing problems and the severity of their lack of attachment ( $r_{\tau}$  = .58, .65). The severity of students' externalizing behaviors was moderately and significantly correlated with the severity of their extreme beliefs ( $r_{\tau}$  = .51).

According to Hirschi (1969), when adolescents endorse beliefs opposed to the moral view of society and lack a close bond with others as well as a lack of concern regarding others' opinions (i.e., parents, peers, or school), they are more likely to engage in delinquent behaviors. In the present research, six weak correlations were found. The severity of students' internalizing problems was weakly and significantly correlated with the severity of their externalizing behaviors and the severity of their lack of attachment ( $r_{\tau} = .42, .46$ ). Also, the severity subscale had weak and significant correlation with the severity of students' extreme beliefs ( $r_{\tau} = .48$ ). A weak and significant correlation was found with the severity of students' lack of attachment and the severity of students' extreme beliefs and their internalizing problems ( $r_{\tau} = .23$ ). Finally, a weak and nonsignificant correlation was found with the severity of students' lack of attachment and their extreme beliefs ( $r_{\tau} = .21$ ).

Severity Subscale and Frequency Construct Correlations. As indicated by Silver et al. (2018) and Vossekuil et al. (2002), students' mental health stressors and lack of interest in others are possible indicators to underlying problems. Based on the school personnel's evaluations, 10 correlations were found from very strong to moderate in strength. A very strong and significant correlation was found with the severity and frequency of students' externalizing behaviors ( $r_{\tau}$  = .92). Also, a strong and significant correlation was found with the frequency of middle school students' concerns and the severity or seriousness of students' expressions or demonstrations of

concerns ( $r_{\tau}$  = .88). A strong and significant relationship was found with the severity of students' externalizing behaviors and the frequency subscale ( $r_{\tau}$  = .75). A strong and significant correlation was found with the severity of students' internalizing problems and the frequency of their internalizing problems ( $r_{\tau}$  = .84). A very strong and significant relationship was found with the severity of students' extreme beliefs and the frequency of their extreme beliefs ( $r_{\tau}$  = .95). Students' severity of internalizing problems, extreme beliefs, and lack of attachment moderately and significantly correlated with the frequency subscale ( $r_{\tau}$  = .51, .56, .61). A moderate and significant correlation was found with students' severity of externalizing behaviors and their frequency of extreme beliefs ( $r_{\tau}$  = .51). A moderate and significant relationship was found with students' severity and frequency of their lack of attachment ( $r_{\tau}$  = .69).

As noted by Álvarez-García et al. (2019), antisocial friendships can have a moderate effect on adolescents' overall antisocial behaviors. In the present research, five weak correlations were found. The severity of students' externalizing behaviors and their lack of attachment was weakly and significantly correlated with the frequency of their internalizing problems ( $r_{\tau}$  = .37, .44). A weak and significant correlation was found with the severity of students' lack of attachment and the frequency of their externalizing behaviors ( $r_{\tau}$  = .49). A weak and nonsignificant relationship was found with the severity of students' extreme beliefs and the frequency of their internalizing problems ( $r_{\tau}$  = .29). Finally, a weak and nonsignificant correlation was found with the severity of students' lack of attachment and the frequency of their extreme beliefs ( $r_{\tau}$  = .42).

**Severity Inter-Item Correlations.** Less than one quarter of the significant severity interitem correlations were strong ( $r_{\tau} = .70 - .83$ ). And, more than half of the severity interitem correlations were moderate and significant in strength ( $r_{\tau} = .50 - .68$ ). As supported by research

(Burton & Mazerolle, 2011), reliability can be derived from inter-item strength levels (i.e., moderate or higher). In the present research, 71% (i.e., 27) items significantly correlated (i.e., moderately and strongly) with at least one other item on a subscale for the severity of students' internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment ( $r_{\tau} = .50$  - .83), resulting in reliability for the severity subscale. Conversely, 26 inter-item correlations were significant at a weak level and were not supported for reliability ( $r_{\tau} = .44$  - .49).

## **Internalizing Problems**

According to Benzi et al. (2018), internalizing problems are a significant adolescent concern that can vary. Relevant research identified anxiety, depression, psychosomatic symptoms (i.e., headaches or stomachaches), suicidal ideation, mental health stressors, and personality traits as signs and symptoms of internalizing problems in adolescents (Benzi et al., 2018; Bonanno & Levenson, 2014; Liu et al., 2011; Malecki et al., 2015; Pine et al., 1998; Silver et al., 2018; Terzian et al., 2011; Vossekuil et al., 2002). In the present research, school personnel's evaluations of middle school students' internalizing problems were the highest for frequency (M = 30.78) and severity (M = 28.07) when compared to students' externalizing behaviors (M = 15.26; 14.63). Both the frequency and severity of students' internalizing problems fell within a moderate level of concern. According to the school personnel, middle school students experienced internalizing problems more often and more severely when compared to students' externalizing behaviors.

Benzi et al. (2018) found relationships between maladaptive personality traits (i.e., negative affect, detachment, antagonism, disinhibition, and psychoticism) and psychological distress (i.e., anxiety, depression, withdrawn, grandiosity, impulsivity, and delusions; r = .22 - .64). Similar to Benzi et al. (2018), in the present research, a moderate and significant

relationship was found between middle school students' frequency of their anxiety and sadness, as well as moderate and significant relationships with their severity of withdrawal (i.e., avoidance in social situations) and leakage (i.e., harmful intent made in writings, drawings, social media posts, or communicated to peers;  $r_{\tau} = .50$  - .54). Based on school personnel's evaluation, the frequency of students' internalizing problems (i.e., anxiety and sadness) increased concurrently with the severity of their withdrawal and leakage.

According to Massing-Schaffer et al. (2019), adolescents (i.e., 12 to 18 years old) are at a higher rate of suicidal ideation when compared to other developmental stages of children. Massing-Schaffer et al. (2019) found a relationship between interpersonal stressful events and increased risk of suicidal ideation for female adolescents (r = .17). In the present research, a moderate and significant correlation was found for students' severity of their indirect suicidal ideation and their sadness ( $r_{\tau} = .50$ ). According to Vossekuil et al. (2002), 78% of school violence offenders experienced suicidal ideation and behaviors (e.g., past suicide attempts) prior to an act of violence in schools. In the present research, a moderate and significant correlation was found for students' severity of suicidal behaviors and their suicidal ideation ( $r_{\tau} = .52$ ). The severity of middle school students' suicidal behaviors increased as their suicidal ideation increased. Additionally, a moderate and significant correlation was found for how severe students' low self-esteem and suicidal behaviors were ( $r_{\tau} = .54$ ). Based on school personnel's evaluation, the higher the severity of middle school students' low self-esteem, the more their suicidal ideation increased.

#### Externalizing Behaviors

Although externalizing behaviors can be characteristic of adolescent development, the frequency and severity of the externalizing behaviors can be indicators of a deeper struggle.

Vossekuil et al. (2002) pointed out that the majority of violent offenders displayed noticeable externalized behavioral changes prior to acts of violence. On average, school personnel's evaluation of how frequent (M = 15.26) and severe (M = 14.63) middle school students externalizing behaviors were lower than their internalizing problems (M = 30.78; 28.07). Also, school personnel's evaluation varied more for externalizing behaviors than internalizing problems. Both the frequency and severity of externalizing behaviors fell within a moderate level of concern.

According to Vossekuil et al. (2002), 68% of offenders obtained a weapon from their family environment and 93% of offenders planned their violent act; whereas, Meloy and O'Toole (2011) found that students try small-scale violent behaviors often times prior to their planned attacks. In the present research, a moderate and significant correlation was found for the frequency and severity of students' small-scale violent acts and practicing plans to commit intended violence ( $r_{\tau}$  = .56 - .63). Due to the lack of contextual information regarding the middle school students scores for small-scale violent acts and practicing plans to commit intended violence, the present research is unable to determine if the finding supports the research by Vossekuil et al. (2002) and Meloy and O'Toole (2011). In the present research, a significant relationship for obtaining weapons was not found. According to relevant research (Borum et al., 2010; O'Toole, 2000; Vossekuil et al., 2002), one of the most important behavioral warning signs from students who may be violent is leakage. In the present research, the frequency of students' leakage was moderately and significantly correlated with their threats towards others, threats towards school, and indirect threats in writing ( $r_{\tau} = .53 - .67$ ). Based on the evaluation of school personnel, as students' leakage increased, their expressions or demonstrations of threats also increased. Although adolescents' leakage and changes in their behaviors do not always lead

to violence (Leuschner et al., 2011; Leuschner et al., 2017), their leakage and behaviors can be a significant concern and indicate that a student could benefit from targeted counseling sessions.

### **ISVPA Limited Reliability**

In the present research, the type of reliability assessed with the ISVPA was limited for two constructs; extreme beliefs and lack of attachment. Although ideas related to extreme beliefs and lack of attachment are included in the counseling and psychology disciplines, the two constructs are predominately discussed in the criminology and sociology fields (Hirschi, 1969; McGloin & Thomas, 2019; Meloy and O'Toole, 2011; Sommer et al., 2014; Trip et al., 2019; O'Toole, 2000).

#### Extreme Beliefs

Extreme beliefs can impact adolescents negatively resulting in school violence. Developmentally, adolescents are formulating their sense of self and belief systems. As indicated by Hirschi (1969), beliefs that are opposite to the collective societal norms can result in an individual's violent behaviors. For the present research, the results were based on school personnel's evaluation of middle school students' frequency (M = 1.22) and severity (M = 1.19) on only two ISVPA items for extreme beliefs. Also, tests for distribution of scores indicated that extreme beliefs was not normal. The frequency and severity of extreme beliefs had the most nonsignificant and weak correlations with the other constructs ( $r_{\tau} = .21 - .42$ ). According to school personnel, middle school students were experiencing extreme beliefs the least; however, due to the lack of validity, students' extreme beliefs were unable to be compared to internalizing problems and externalizing behaviors that had been supported for reliability.

According to Meloy and O'Toole (2011), students' existing radicalized belief systems are enhanced when they plan to further past offenders' violent actions or their rationale for violence.

With a minimal number of two items, moderate and significant relationships were found for how frequent and severe school personnel reported that students identified with past offenders and threats towards school (e.g., school shooting;  $r_{\tau} = .51 - .57$ ), similar to what Meloy and O'Toole (2001) and Malkki (2014) described as a form of violence symbolism. The more a student identified with past offenders (e.g., Columbine shooters) the more often and more serious a student expressed threats of violence towards a school. As indicated in SCT and CBT, extreme beliefs have a negative impact on individuals' view of self or the world that result in violent or aggressive external behaviors (Beck, 1970, 2011; Farrington, 2019; Leuschner et al., 2017; O'Toole, 2000; Silver et al., 2018). Students who expressed extreme beliefs were often unable to maintain long term relationships ( $r_{\tau} = .53$ ).

# Lack of Attachment

The final construct that can contribute to adolescent violence in schools is lack of attachment to others (i.e., parents, peers, and school). According to Hirschi's (1969) SCT, attachment to parents, peers, and schools is a critical factor in preventing violent behaviors and strong bonds with others serve as a protective factor. On average, school personnel's evaluation was low for how frequent (M = 6.93) and severe (M = 6.04) middle school students lack of attachment was. However, tests of normality indicated that lack of attachment frequency did not have a normal distribution. Additionally, the frequency of lack of attachment had four nonsignificant and weak correlations with other constructs ( $r_{\tau} = .27 - .36$ ) compared to the two nonsignificant and weak correlations for the severity of lack of attachment ( $r_{\tau} = .21 - .42$ ). Similarly, to extreme beliefs, lack of attachment did not support reliability.

Hirschi (1969) said that the lack of quality in students' relationship dynamics and social bonds with others play a key role in their development of aggression and violent behaviors.

On the ISVPA, only one item related to parent attachment (i.e., item 7, parent[s] do not supervise activities). Based on results of school personnel's evaluation of students, item 7 did not correlate significantly with any other item, which could be attributed to the small sample size or that the item is not relevant for a preventative school violence assessment. Quality of peer influence (i.e., positive or negative) can have an impact on adolescents' decision-making and engagement in beneficial or dangerous behaviors (Leuschner et al., 2017; McGloin & Thomas, 2019; Sommer et al., 2014; O'Toole, 2000). For school attachment, item 34 (i.e., uninvolved in school activities) was not correlated with other items.

#### **Implications**

In the present research, several implications resulted for researchers of the prevention of school violence, school personnel, and school counselors. Since the 1999 Columbine High School shooting (Cornell, 2020; Goforth, 2019; King & Bracy, 2019), school violence has become a global concern (Anderson & Sabia, 2018; McMahon, 2020) that has created a shift to a more preventative approach. Authoritative efforts have been deemed ineffective (Gaudiano & Mitchell, 2017). In the present research, several implications were determined based on the findings from the exploratory nature of the pilot study for school personnel, student assistance, and student advocacy.

#### **Implications for School Personnel**

The stage approach to crisis is especially relevant to school counseling and school environments. Of the four stages (i.e., prevention, preparedness, intervention and response, and postvention and recovery), threat assessment procedures align with the prevention and preparedness stages of crises in schools. An implication of the present research is in favor of the threat assessment approach rather than a risk assessment approach for school violence prevention

and preparedness. School personnel (i.e., teachers, principals, and school counselors) play a significant role in the prevention of a crisis (Ozer & Weinstein, 2010; Poland & Conte, n.d.). Additionally, the NASP (2002, 2014) recommends that clear district policies are established as a preventative measure for school violence that include the identification of threat assessment procedures. Additionally, the plans and policies to address school violence should be prepared prior to an act of violence and should be disseminated to all school personnel (ASCA, 2019; Moore & Susan, 2015). An implication from the present research is that continued validity and reliability research is needed on the ISVPA to provide an additional assessment for school personnel.

Although threat assessments are widely utilized and supported as preventative measures to school violence (Cornell, 2020; NASP, 2002; O'Toole, 2000; Van Dreal, 2011), a valid and reliable interdisciplinary (i.e., counseling, psychology, criminology, and sociology) assessment for the prevention of school violence does not exist. Existing threat assessment procedures are implemented after the communication of a threat or violent act and due to the potential immediacy of the situation, may not consider the contributing factors of students' internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment. For school-based threat assessment teams, an implication from the present research is that a preventative assessment, such as the ISVPA could be used in conjunction with existing school assessments to help connect students to counseling services even if a threat is deemed transient.

#### **Implications for Student Assistance**

Relevant research has supported the idea that students' internalizing and externalizing problems are common areas of focus in school-based research (Achenbach & Edlebrock, 1979; Gerald et al., 2016; Goodman-Scott et al., 2019; Hoover et al., 2018; Nadeem et al., 2011;

Santiago et al., 2018). An implication from the present research is that internalizing problems and externalizing behaviors were more prevalent when assessing middle school students when compared to the other two factors that can impact students (e.g., extreme beliefs or lack of attachment). The present research confirms that continued assessment by teachers, principals, and school counselors of students' internalizing problems and externalizing behaviors could assist school personnel when helping students who may be experiencing concerns and need support before school violence occurs.

Also, an implication of the present research is that extreme beliefs and lack of attachment may be additional factors that impact students, which would indicate a need for training of school personnel. Extreme beliefs and lack of attachment have had limited focus in school-based counseling research. In comparison, research in criminology and sociology on school violence have identified extreme beliefs and lack of attachment as potential factors that impact adolescents and their delinquent behaviors due to the lack of bonds adolescents have with society or others (i.e., parents, peers, and school; Hirschi, 1969; O'Toole, 2000) and their extreme beliefs when identifying with others who are violent (McCauley & Moskalenko, 2008; Trip et al., 2019). School-based counseling research could benefit from research awareness based in other disciplines, such as criminology and sociology that could further research in school violence thereby assist students. New assessments, such as the ISVPA could assist in assessing factors that impact students, such as extreme beliefs and lack of attachment.

#### **Implications for Student Advocacy**

Although the present research sought to incorporate an interdisciplinary research approach, the primary purpose has been from a counseling perspective to provide counseling services to students who need help. A standard in the school counseling field is advocacy (ASCA)

2019) and according to the *ASCA National Model* (2019), "school counselors act as advocates, leaders, collaborators, and consultants who create systemic change by providing equitable educational access and success by connecting their school counseling programs to the district's mission and improvement plans" (p. 31). Continued research in validating the ISVPA for future use could provide an assessment and preventive approach that school counselors could use to help connect students in need of counseling.

However, the increased demand for student support through school-based counseling services has been impacted by the lack of time and scheduling availability current school counselors are faced with. Thus, assessment time that can be used to assess student concerns of internalizing problems, extreme beliefs, externalizing behaviors, and lack of attachment may be limited. Based on the *ASCA National Model* (2019), the ideal caseload for a school counselor is 250 to 1; however, most caseloads surpass that ratio, with a national average ranging from 419 to 1 to 1,135 to 1 for elementary and middle schools (National Center for Education Statistics, n.d.). An implication from the present research is that change is needed in schools that would employ more school counselors to effectively assess negative factors that impact students and assist students who need counseling to reduce school violence and improve the school climate.

#### Limitations

In the present research, several limitations exist that included a small representation of the four disciplines in the expert panel, decreased participation of the focus and peer review group members, limited item representation for two constructs, challenges with data collection, small sample size of 27 participants, and the ISVPA's format and distribution to participants.

The first limitation was the under representation of interdisciplinary disciplines (i.e., counseling, psychology, criminology, and sociology) on the expert panel. As indicated by the

CIHR (2005) and Choi and Pak (2006), the term interdisciplinary refers to the process of ideas across disciplines to be analyzed and synthesized to create a comprehensive understanding of a topic. The expert panel was an important aspect to the validity of the ISVPA. Of the final six expert panelists, one identified from a counseling psychology discipline and one from sociology education discipline as well as, two were from each of the psychology and criminology disciplines. Due to the limited representation of the four disciplines, notably counseling and sociology, a limitation was the limited number of experts for the evaluation on the ISVPA. Expert panel recruitment took place during the COVID-19 pandemic, which could be a contributor to the limited number of panelists. A common response from experts was that they were unable to assume another task to their workload; therefore, could not participate.

A second limitation pertained to a decreased number of focus group and peer reviewers. In addition to the expert panel, the evaluations from the focus group and peer reviewers were an important aspect to the validity of the ISVPA. However, both the focus group and peer reviewers were limited to current UNO graduate students in the Educational Leadership and Counselor Education programs. Based on multiple recruitment efforts, only four graduate students were recruited for each group. The limitation could be attributed to the COVID-19 pandemic and Hurricane Ida that impacted the southern region of the United States shorty after recruitment began.

A third limitation was the limited item representation of the two constructs, extreme beliefs and lack of attachment. Based on the expert panel quantitative evaluation, only two items were identified for extreme beliefs and only four identified for lack of attachment. The two constructs (i.e., extreme beliefs and lack of attachment) had significantly less items than the other two constructs (i.e., internalizing problems, 18; externalizing behaviors, 14). Due to the

low item representation, results for extreme beliefs and lack of attachment were significantly limited. The validity and reliability of the two constructs (i.e., extreme beliefs and lack of attachment) could not be endorsed in the present research.

A fourth limitation was the shift in data collection procedures that resulted in a change from parametric to nonparametric analyses. The parametric procedures planned for the present research could have contributed to the validity and reliability of the ISVPA. However, due to the significantly small sample, a shift to an exploratory pilot study and nonparametric procedures occurred. Due to the exploratory nature of a pilot study and the chance of bias in results (Hertzog, 2008), the results in the present research lack generalizability and require significant future research to further support the findings. Specifically, additional validity and reliability testing would be needed prior to the ISVPA being utilized in schools.

A fifth limitation was related to a significantly small sample size. During the data collection phases, the COVID-19 pandemic was at its peak. In the present research, teachers, principals, and school counselors may have been unable to participate due to time constraints, work overload, and the amount of time to complete the ISVPA. For example, one potential participant stated "we are so very swamped that I do not think that I can do one more thing right now. I looked at your survey and started it, but it got so long that I ran out of time." Due to the length of the ISVPA (i.e., 38 items), a shorter version may be needed to address the time constraints of completion. The dropout rates of participants are important to note as possible changes should be made in instrument administration for recruitment in a larger study (Hertzog, 2008).

A sixth limitation was related to the ISVPA administration to participants via a Qualtrics survey. The possibility of technology issues and the length of the survey could have contributed

to the 23 responses that were unanswered (i.e., surveys were opened by participants, but no questions were answered). Additionally, the format on the Qualtrics survey had the frequency and severity Likert-scale listed side-by-side for each item (i.e., participants scored both subscales at the same time). A limitation could have been in the bias of participants responses given the side-by-side format of the question and could have contributed to the 2 responses that were incomplete (i.e., no responses to the 38 severity subscale items).

#### **Recommendations for Future Research**

Although the present research provided limited validity and reliability of the ISVPA, several recommendations for future research can be made. Future research could be on revisions to the ISVPA (i.e., redefining constructs, adding new and revising existing construct items, and scoring), further validity and reliability testing, and field testing the ISVPA with a larger sample of school personnel.

In the present research, several revisions to the ISVPA were identified that related to redefining constructs, adding new and revising existing subscale items, and scoring. Future research could include revisiting the literature to identify more current and appropriate definitions and related terms for the constructs included in a preventative school violence assessment, the ISVPA. Additionally, new item suggestions were made by the expert panel and the peer review group that indicated an area of future research would align with more items being added or revised. As recommended by Benson and Clark (1982), the item pool should be doubled for the final instrument. Due to the results of the expert panel quantitative evaluation, extreme beliefs and lack of attachment had the lowest item count per construct. An area of future research would be to establish a more extensive item pool for each construct and to add an additional expert panel to evaluate the items for content validity.

Additionally, the scoring for the ISVPA presents as another area of future research. As the items for the constructs are expanded, the scoring would subsequently require revisions. However, as recommended by an expert from the present research, less focus should be placed on quantifiably scoring levels. Therefore, future research would require further exploration of an appropriate scoring for the ISVPA.

An area of future research would be to further the validity and reliability of the ISVPA. The validation process is a very important aspect of instrument development as it ensures the instrument has measured what it was designed to measure (Abell et al., 2009; Dimitrov, 2012; Field, 2013). In addition to expanding the existing face and content validity discussed in the present research, construct and concurrent validity could also be utilized in subsequent validity tests of the ISVPA. For example, construct validity could be assessed through parametric analyses (i.e., exploratory factor analysis) to determine if factors emerge that reflect the constructs. Also, concurrent validity could be examined through administering the ISVPA and the PETRA (Schneller, 2005). The PETRA evaluates the level of risk after a student communicates a threat and is used in conjunction with established threat assessment procedures as the results assist with identified risk levels. Another area of future research related to testing is to implement the ISVPA alongside existing threat assessment procedures (e.g., STAS). Through testing the ISVPA with existing procedures, the instrument's validity within the context of threat assessment could be determined.

Similarly, reliability is an important aspect of instrument development to determine consistency and freedom from errors (Dimitrov, 2012; Gravetter & Wallnau, 2013). Although internal consistency was initially reviewed through the ISVPA inter-item correlations using the two subscales, the results were not generalizable or substantial enough to endorse the ISVPA as a

reliable instrument. According to Hertzog (2008) "given the imprecision of these correlation estimates, it would not be advisable to make final decisions about item inclusion or deletion based on their criterion alone using pilot data" (p. 182). Continued reliability analyses (i.e., exploratory factor analysis and Cronbach's alpha) could be an area of future research. Overall, establishing strong validity and reliability of the ISVPA would be important prior to the implementation of the assessment in schools.

Pilot studies are used as initial research prior to the implementation of a larger study (Hertzog, 2008). Although a pilot study can be beneficial for planning a larger study given the information obtained from confidence intervals and correlations, potential biases that can present with small samples when results are interpreted should be considered (Hertzog, 2008). An area of future research would be to field test the ISVPA with a larger sample of school personnel at all grade levels. A larger sample would provide more accurate and generalizable results, as well as establish validity and reliability of the ISVPA.

#### **Conclusions**

The results of the present research indicated initial; however, limited validity and reliability. The exploratory nature of the pilot study and the lack of generalizability limited the extent of the results. Although many improvements are needed prior to an endorsement of validity and reliability of the ISVPA, a need for an interdisciplinary school violence preventative assessment is still evident. To increase the validity and reliability of the ISVPA, subsequent analyses (e.g., exploratory factor analyses) and repeated field testing are needed. Despite the significant challenges experienced with data collection, the small sample in the present pilot study was similar to demographic trends in education and school counseling. The sample did support a 75% confidence level that contributed to the results of the present pilot study. The

moderate and strong correlations for the subscales, constructs, and items were promising; however, results should be viewed as exploratory findings.

#### References

- ABC News. (2019). School shootings in America: See a map of all incidents from 2010-2019.

  <a href="https://abc7news.com/school-shootings-how-many-shooting-incidents-california/5697308/">https://abc7news.com/school-shootings-how-many-shooting-incidents-california/5697308/</a>
- Abell, N., Springer, D. W., & Kamata, A. (2009). *Developing and validating rapid assessment instruments*. Oxford University Press.
- Achenbach, T. M., & Edelbrock, C. S. (1979). The child behavior profile: II. Boys aged 12-16 and girls aged 6-11 and 12-16. *Journal of Consulting and Clinical Psychology*, 35, 223-233.
- Achenbach, T. M., & Edelbrock, C. (1983). Manual for the child behavior checklist and revised child behavior profile. Queen City Printers.
- Adom, D., Hussein, E. K., & Joe, A-A. (2018). Theoretical and conceptual framework:

  Mandatory ingredients of a quality research. *International Journal of Scientific Research*,
  7(1), 438-441.
- Allen, M., Burt, K., Bryan, E., Carter, D., Orsi, R., & Durkan, L. (2002). School counselors' preparation for and participation in crisis intervention. *Professional School Counseling*, 6(2), 96-102. <a href="https://www.jstor.org/stable/42732398">https://www.jstor.org/stable/42732398</a>
- Álvarez-García, D., González-Castro, P., Núñez, J. C., Rodríguez, C., & Cerezo, R. (2019).

  Impact of family and friends on antisocial adolescent behavior: The mediating role of impulsivity and empathy. *Frontiers in Psychology*, 10(2071), 1-9. <a href="https://doi.org/">https://doi.org/</a>

  10.3389/fpsyg.2019.02071

- American Psychological Association. (APA, 2009). *Children and trauma: Update for mental health professionals*. <a href="https://www.apa.org/pi/families/resources/children-trauma-update">https://www.apa.org/pi/families/resources/children-trauma-update</a>
- American School Counselor Association. (ASCA, 2017). The school counselor and the identification, prevention and intervention of behaviors that are harmful and place students at-risk. <a href="https://www.schoolcounselor.org/Standards-Positions/Position-Statements/ASCA-Position-Statements/The-School-Counselor-and-the-Identification,-Preve">https://www.schoolcounselor.org/Standards-Positions/Position-Statements/The-School-Counselor-and-the-Identification,-Preve</a>
- American School Counselor Association. (ASCA, 2019). ASCA national model: A framework for school counseling programs (4th ed.). Author.
- American School Counselor Association. (ASCA, 2021). *ASCA research report: State of the profession 2020*. <a href="https://www.schoolcounselor.org/getmedia/bb23299b-678d-4bce-8863-cfcb55f7df87/2020-State-of-the-Profession.pdf">https://www.schoolcounselor.org/getmedia/bb23299b-678d-4bce-8863-cfcb55f7df87/2020-State-of-the-Profession.pdf</a>
- Anderson, D. M., & Sabia, J. J. (2018). Child-access-prevention laws, youths' gun carrying, and school shootings. *The Journal of Law and Economics*, 61(3), 489-524. <a href="https://doi.org/10.1086/699657">https://doi.org/10.1086/699657</a>
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment:

  Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-454. https://doi.org/10.1007/BF02202939
- Association for Career and Technical Education. (ACTE, 2017). Career exploration in middle school: Setting students on the path to success. Alexandria, VA.
- Austin, S., & Joseph, S. (1996). Assessment of bully/victim problems in 8 to 11 year-olds.

  The British Journal of Educational Psychology, 66, 447-56.

  https://doi.org/10.1111/j.2044-8279.1996.tb01211.x

- Bacchini, D., & Esposito, C. (2020). Growing up in violent contexts: Differential effects of community, family, and school violence on child adjustment. In N. Balvin & D.Christie (Eds.), *Children and peace: From research to action*. Springer, Cham.
- Baciğlu, S. D., & Kocabiyik, O. O. (2019). A study on prospective school counselors' views on school violence. *Universal Journal of Educational Research*, 7(1), 146-156. <a href="https://doi.org/10.13189/ujer.2019.070119">https://doi.org/10.13189/ujer.2019.070119</a>
- Bagner, D. M., Sheinkopf, S. J., Vohr, B. R., & Lester, B. M. (2010). Parenting intervention for externalizing behavior problems in children born premature: An initial examination. *Journal of Developmental and Behavioral Pediatrics*, 31(3), 209–216. https://doi.org/10.1097/DBP.0b013e3181d5a294
- Barendregt, C. S., Laan, A. M., Bongers, I. L., & Nieuwenhuizen, C. (2018). Quality of life, delinquency and psychosocial functioning of adolescents in secure residential care:

  Testing two assumptions of the good lives model. *Child and Adolescent Psychiatry and Mental Health*, 12(4), 1-10. <a href="https://doi-org.ezproxy.uno.edu/10.1186/s13034-017-0209-9">https://doi-org.ezproxy.uno.edu/10.1186/s13034-017-0209-9</a>
- Beavers, A. S., Lounsbury, J. W., Richards, J. K., Huck, S. W., Skolits, G. J., & Esquivel, S. L. (2013). Practical considerations for using exploratory factor analysis in educational research. *Practical Assessment, Research, & Evaluation, 18*(6). <a href="https://doi.org/10.7275/qv2q-rk76">https://doi.org/10.7275/qv2q-rk76</a>
- Beck, A. T. (1970). Cognitive therapy: Nature and relation to behavior therapy. *Behavior Therapy*, *I*(2), 184-200. <a href="https://doi.org/10.1016/S0005-7894(70)80030-2">https://doi.org/10.1016/S0005-7894(70)80030-2</a>
- Beck, A. T. (1976). *Cognitive therapy and emotional disorders*. International University Press. Beck, J. S. (2011). *Cognitive behavior therapy: Basics and beyond*. (2nd ed.). Guilford Press.

- Beck, A. T., & Miller, A. (2012). *Instructors manual for Aaron Beck on cognitive therapy*. https://www.psychotherapy.net/data/uploads/51102b99efbaf.pdf
- Beck, A. T., Steer, R.A., & Garbin, M.G. (1988). Psychometric properties of the Beck depression inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8(1), 77-100.
- Benson, J., & Clark, F. (1982). A guide for instrument development and validation. *American Journal of Occupational Therapy*, *36*, 789-800. <a href="https://doi.org/10.5014/ajot.36.12.789">https://doi.org/10.5014/ajot.36.12.789</a>
- Benzi, I. M. A., Preti, E., Di Pierro, R., Clarkin, J. F., & Madeddu, F. (2018). Maladaptive personality traits and psychological distress in adolescence: The moderating role of personality functioning. *Personality and Individual Differences*, *140*, 33-40. <a href="https://doi.org/10.1016/j.paid.2018.06.026">https://doi.org/10.1016/j.paid.2018.06.026</a>
- Bergin, C., & Bergin, D. (2009). Attachment in the classroom. *Educational Psychology Review*, 21, 141-170. https://doi.org/10.1007/s10648-009-9104-0
- Blair, C., & Raver, C. C. (2012). Child development in the context of adversity: Experiential canalization of brain and behavior. *American Psychological Association*, 67(4), 309-318. https://doi.org/10.1037/a0027493
- Böckler, N., & Seeger, T. (2013). Revolution of the dispossessed: School shooters and their devotees on the web. In N. Böckler, T. Seeger, P. Sitzer & W. Heitmeyer (Eds.), *School shootings: International research, case studies and concepts for prevention* (pp. 309-339). Springer.
- Bonanno, C. M., & Levenson, R. L. (2014). School shooters: History, current theoretical and empirical findings, and strategies for prevention. *Sage Open, 4*(1), 1-11. https://doi.org/10.1177/2158244014525425

- Borum, R. (2000). Assessing violence risk among youth. *Journal of Clinical Psychology*, *56*(10), 1263–1288. <a href="https://doi.org/10.1002/1097-4679(200010)56:10<1263::AID-JCLP3>3.0.CO;2-D">https://doi.org/10.1002/1097-4679(200010)56:10<1263::AID-JCLP3>3.0.CO;2-D</a>
- Borum, R. (2011). Radicalization into violent extremism I: A review of social science theories.

  \*\*Journal of Strategic Security, 4(4), 7-36. <a href="http://dx.doi.org/10.5038/1944-0472.4.4.1">http://dx.doi.org/10.5038/1944-0472.4.4.1</a>
- Borum, R., Cornell, D. G., Modzeleski, W., & Jimerson, S. R. (2010). What can be done about school shootings? A review of the evidence. *Educational Researcher*, *39*(1), 27–37. https://doi.org/10.3102/0013189X09357620
- Bosworth, K., & Espelage, D. (1995). *Teen conflict survey*. Center for Adolescent Studies, Indiana University.
- Bowlby, J. (1969). Attachment. Attachment and loss: Vol. 1. Loss. Basic Books.
- Brodie, Z. P., Goodall, K., Darling, S., & McVittie, C. (2019). Attachment insecurity and dispositional aggression: The mediating role of maladaptive anger regulation. *Journal of Social and Personal Relationships*, *36*(6), 1831–1852.

  <a href="https://doi.org/10.1177/0265407518772937">https://doi.org/10.1177/0265407518772937</a>
- Brooks, S. M. (2017). Violence among students and school staff: Understanding and preventing the causes of school violence. CreateSpace Independent Publishing Platform.
- Brown, C. H. (2018). Perceptions of school counselors surviving a school shooting. *Professional School Counseling*, 22(1), 1-13. <a href="https://doi.org/10.1177/2156759X19853250">https://doi.org/10.1177/2156759X19853250</a>
- Brunstein-Klomek, A., Marrocco, F., Kleinman, M., Schonfeld, I. S., & Gould, M. S. (2007).

  Bullying, depression, and suicidality in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry 46*, 40–49. <a href="https://doi.org/10.1097/01.chi.0000">https://doi.org/10.1097/01.chi.0000</a>

  242237.84925.18

- Brymer, M., Taylor, M., Escudero, P., Jacobs, A., Kronenberg, M., Macy, R., Mock, L., Payne, L., Pynoos, R., & Vogel, J. (2012). *Psychological first aid for schools: Field operations guide*. (2nd ed.). National Child Traumatic Stress Network.
- Burton, L. J., & Mazerolle, S. M. (2011). Survey instrument validity part II: Validation of a survey instrument examining athletic trainers' knowledge and practice beliefs regarding exertional heat stroke. *Athletic Training Education Journal*, *6*(1), 36-45. https://doi/org/10.4085/1947-380X-6.1.36
- Calhoun, F. S., & Weston, S. W. (2015). Perspectives on threat management. *Journal of Threat Assessment and Management*, 2(3-4), 258-26. http://dx.doi.org/10.1037/tam0000056
- Canadian Institutes of Health Research. (CIHR, 2005). *Training program grant guide:*Strategic training initiative in health research. https://cihr-irsc.gc.ca/e/50282.html
- Carter, S. L., Hicks, J., & Lee, J. (2019). Examining the acceptability of school shooting prevention strategies among school counselors and other school personnel. *Journal of Counselor Practice*, 10(2), 51-69. <a href="https://doi.org/10.22229/eta1022019">https://doi.org/10.22229/eta1022019</a>
- Centers for Disease Control. (CDC, 2021). Fast fact: Preventing school violence

  https://www.cdc.gov/violenceprevention/youthviolence/schoolviolence/index.html
- Chang, L., Lu, H. J., Lansford, J. E., Skinner, A. T., Bornstein, M. H., Steinberg, L...& Tapanya. (2019). Environmental harshness and unpredictability, life history, and social and academic behavior of adolescents in nine countries. *Developmental Psychology*, 55(4), 890-903. http://dx.doi.org/10.1037/dev0000655
- Chapman, P. L., & Mullis, R. L. (2000). Racial differences in adolescent coping and self-esteem. *Journal of Genetic Psychology*, *161*(2), 152–160. <a href="https://doi.org/10.1080/00221320009596702">https://doi.org/10.1080/00221320009596702</a>

- Chavez, N., Andone, D., & Wolfe, E. (2022). Parents waited late into the night for dead children to be identified after Texas elementary school massacre. *CNN*. <a href="https://www.cnn.com/">https://www.cnn.com/</a>
  <a href="https://www.cnn.com/">/2022/05/25/us/uvalde-texas-elementary-school-shooting-wednesday/index.html</a>
- Chen, W. Y. (2018). Adolescents' internalizing behaviors after extreme violence exposure: A comparison of race and gender for African American and Asian American youth. *Families in Society*, 90(2), 145–152. <a href="https://doi.org/10.1606/1044-3894.3870">https://doi.org/10.1606/1044-3894.3870</a>
- Choi, B. C., & Pak, A. W. (2006). Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy: 1. Definitions, objectives, and evidence of effectiveness. *Clinical and Investigative Medicine*, 29(6), 351–364.
- Clark, S. L. (2011). Factors related to school violence victimization: The role of extracurricular activities. [Doctor of dissertation, University of Iowa]. <a href="https://doi.org/10.170">https://doi.org/10.170</a>
  77/etd.id8un5x1
- Clark, L. A., & Watson, D. (2019). Constructing validity: New developments in creating objective measuring instruments. *Psychological Assessment*, 31(12), 1412-1427. http://dx.doi.org/10.1037/pas0000626
- Cohen, J. (1992). A power primer. Psychological Bulletin, 112(1), 155-159.
- Collier, N. L., Brown, S. J., Montes, A. N., Pesta, G. B., Mears, D. P., & Siennick, S. E. (2018).

  Navigating get-tough and support-oriented philosophies for improving school safety:

  Insights from school administrators and school safety staff. *American Journal of Criminal Justice*, 44(5), 705-726. <a href="https://doi.org/10.1007/s12103-018-9462-6">https://doi.org/10.1007/s12103-018-9462-6</a>
- Committee on School Health. (2004). School-based mental health services. *Pediatrics*, 113(6), 1839-1845. <a href="https://doi.org/10.1542/peds.113.6.1839">https://doi.org/10.1542/peds.113.6.1839</a>

- Copelan, R., & Ashley, D. (2005). Adolescent and child urgent threat evaluation: Professional manual. Psychological Assessment Resources, Inc.
- Copeland, W. E., Wolke, D., Angold, A., Costello, E. J. (2013). Adult psychiatric and suicide outcomes of bullying and being bullied by peers in childhood and adolescence. *Journal of American Medical Association Psychiatry*, 70(4), 419-426.

  <a href="https://doi.org/10.1001/jamapsychiatry.2013.504">https://doi.org/10.1001/jamapsychiatry.2013.504</a>
- Cornell, D. G. (2007, January). The Virginia model for student threat assessment. In L. Eib, 
  Confronting violence in our schools: Planning, response, and recovery. Symposium 
  conducted at the Public Entity Risk Institute, Tucson, AZ.

  <a href="https://www.doe.k12.de.us/cms/lib/DE01922744/Centricity/Domain/156/virginia-model.pdf">https://www.doe.k12.de.us/cms/lib/DE01922744/Centricity/Domain/156/virginia-model.pdf</a>
- Cornell, D. G. (2020). Threat assessment as a school violence prevention strategy. *Criminal Public Policy*, 19(1), 235–252. https://doi.org/10.1111/1745-9133.12471
- Cornell, D. G. (2020). Overview of the comprehensive school threat assessment guidelines (CSTAG). <a href="https://education.virginia.edu/sites/default/files/images/YVP/Comprehensive">https://education.virginia.edu/sites/default/files/images/YVP/Comprehensive</a> %20School%20Threat%20Assessment%20Guidelines%20overview%20paper%205-26-20.pdf
- Cornell, D. G., & Sheras, P. L. (2005). Guidelines for responding to student threats of violence.

  Sopris West.
- Cornell, D., Maeng, J. L., Burnette, A. G., Jia, Y., Huang, F., Konold, T...& Meyer, P. (2017).

  Student threat assessment as a standard school safety practice: Results from a statewide implementation study. *Psychology Quarterly*, *33*(2), 213-222.

  <a href="http://dx.doi.org/10.1037/spq0000220">http://dx.doi.org/10.1037/spq0000220</a>

- Costello, B. J. (2010). Hirschi, Travis: Social control theory. In F.T. Cullen & P. Wilcox, *Encyclopedia of criminological theory* (pp. 452-459). SAGE Publications, Inc. <a href="http://dx.doi.org/10.4135/9781412959193.n124">http://dx.doi.org/10.4135/9781412959193.n124</a>
- Cretacci, M. A., Rivera, C., Gao, Y., & Zheng, L. (2018). Bonding to bamboo: A social control theory explanation of Chinese crime. *International Journal of Criminal Justice Sciences*, 13(1), 122-136. https://doi.org/10.5281/zenodo.140340
- Crocker, L., & Algina, J. (2008). Reliability and the classical true score model. In *Introduction* to classical & modern theory. (pp.114-130). Cengage.
- Cronbach, L. J. (1951). Coefficient alpha and internal structure of tests. *Psychometrika*, *16*, 297-334.
- Cuellar, M. J., & Theriot, M. T. (2017). Investigating the effects of commonly implemented school safety strategies on school social work practitioners in the United States. *Journal of the Society for Social Work and Research*, 8(4), 511–538. <a href="https://doi.org/10.1086">https://doi.org/10.1086</a>
- Dahlberg, L. L., Toal, S. B., Swahn, M. H., & Behrens, C. B. (2005). *Measuring violence-related attitudes, behaviors, and influences among youths: A compendium of assessment tools*.

  (2nd ed.). Centers for Disease Control and Prevention, National Center for Injury

  Prevention and Control. <a href="https://www.cdc.gov/violenceprevention/pdf">https://www.cdc.gov/violenceprevention/pdf</a>

  /yv\_compendium.pdf
- Davies, G., & Wu, E. (2021). Proud Boys terrorist group designation may deter new recruits and fundraising. *The Conversation*. <a href="https://theconversation.com/proud-boys-terrorist-group-designation-may-deter-new-recruits-and-fundraising-154718">https://theconversation.com/proud-boys-terrorist-group-designation-may-deter-new-recruits-and-fundraising-154718</a>

- De Somma, E., Jaworska, N., Heck, E., & MacQueen, G. M. (2017). Campus mental health policies across Canadian regions: Need for a national comprehensive strategy. *Canadian Psychology/Psychologie 175anadienne*, 58(2), 161–167. <a href="https://doi.org/10.1037/cap">https://doi.org/10.1037/cap</a> 0000089
- DeVellis, R. F. (2017). Scale development: Theory and applications (4th ed.). Sage.
- Dickson, D. J., Laursen, B., Valdes, O., & Stattin, H. (2019). Derisive parenting fosters dysregulated anger in adolescent children and subsequent difficulties with peers. *Journal of Youth and Adolescence*, 48(8), 1567-1579. https://doi.org/10.1007/s10964-019-01040z
- DiClemente, C. M., & Richards, M. H. (2019). Community violence in early adolescence:

  Assessing coping strategies for reducing delinquency and aggression. *Journal of Clinical Child & Adolescent Psychology*, 1-14. https://doi.org/10.1080/15374416.2019.1650365
- Dilliberti, M., Jackson, M., Correa, S., & Padgett, Z. (2019). *Crime, violence, discipline, and safety in U.S. public schools: Findings from the school survey on crime and safety:*2017–18 (NCES 2019-061). U.S. Department of Education. National Center for Education Statistics. http://nces.ed.gov/pubsearch
- Dimitrov, D. M. (2012). Statistical methods for validation of assessment scale data in counseling and related fields. American Counseling Association.
- Ding, C. (2019). Examining item content validity using property fitting analysis via multidimensional scaling. *International Journal of Methods in Psychiatric Research*, 28(1), 1-9. https://doi.org/10.1002/mpr.1771
- Dixon, D. (2005). Never come to peace again: Pontiac's uprising and the fate of the British empire in North America. Norman: University of Oklahoma Press.

- Don, F. J., Driessen, E., Molenaar, P. J., Spijker, J., & Dekker, J. J. M. (2019). Early interventions in cognitive behavioral therapy for depression: A study contrasting a low-adherent and a highly adherent case. *Psychotherapy*, *56*(1), 48–54. <a href="https://doiorg.ezproxy.uno.edu/10.1037/pst0000219">https://doiorg.ezproxy.uno.edu/10.1037/pst0000219</a>
- Donohue, P., Goodman-Scott, E., & Betters-Bubon, J. (2015). Using universal screening for early identification of students at risk: A case example from the field. *Professional School Counseling*, 19(1), 133-143. https://doi.org/10.5330/1096-2409-19.1.133
- Donovan, C. (2016, August 30). Power and effect size [Video]. YouTube. https://www.youtube.com/watch?v=9LVD9oLg1A0
- Doom, J. R., Vanzomeren-Dohm, A. A., & Simpson, J. A. (2016). Early unpredictability predicts increased adolescent externalizing behaviors and substance use: A life history perspective. *Development and psychopathology*, 28(4pt2), 1505–1516. <a href="https://doi.org/10.1017/S0954579415001169">https://doi.org/10.1017/S0954579415001169</a>
- Espelage, D. L., & Hong, J. S. (2019). School climate, bullying, and school violence. In M. J.

  Mayer & S. R. Jimerson (Eds.). *School safety and violence prevention: Science, practice, policy* (pp. 45-69). American Psychological Association.
- Estrada-Martínez, L. M., Caldwell, C. H., Bauermeister, J. A., & Zimmerman, M. A. (2012).

  Stressors in multiple life-domains and the risk for externalizing and internalizing behaviors among African Americans during emerging adulthood. *Journal of Youth and Adolescence*, 41(12), 1600-1612. <a href="https://doi.org/10.1007/s10964-012-9778-3">https://doi.org/10.1007/s10964-012-9778-3</a>
- Everly, G. S., & Bienvenu, O. J. (2018). "Profiling" school shooters: Can we tell who will be the next to kill? *Psychology Today*. <a href="https://www.psychologytoday.com/us/blog/when-disaster-strikes-inside-disaster-psychology/201803/profiling-school-shooters">https://www.psychologytoday.com/us/blog/when-disaster-psychology/201803/profiling-school-shooters</a>

- Farrell, A., Danish S., & Howard, C. (1992). Relationship between drug use and other problem behaviors in urban adolescents. *Journal of Consulting and Clinical Psychology*, 60(5), 705-712.
- Farrell, A. D., Sullivan, T. N., Goncy, E. A., & Le, A. H. (2016). Assessment of adolescents' victimization, aggression, and problem behaviors: Evaluation of the problem behavior frequency scale. *Psychological assessment*, 28(6), 702–714. <a href="https://doi.org/10.1037/pas0000225">https://doi.org/10.1037/pas0000225</a>
- Farrington, D. P. (2019). Childhood risk and protective factors for early desisters, late desisters and life-course persistent offenders. *Revista Española de Investigación Criminológica*, *1*(17), 1-33.
- Feidler, N., Sommer, F., Lueschner, V., & Scheithauer, H. (2020). Student crisis prevention in schools: The NETWorks against school shooting program (NEWWASS): An approach suitable for the prevention of violent extremism? *International Journal of Developmental Science*, 13(3-4), 109-122. https://doi.org/10.3233/DEV-190283
- Fernández-Gómez, E., Martín-Salvador, A., Luque-Vara, T., Sánchez-Ojeda, M. A., Navarro-Prado, S., & Enrique-Mirón, C. (2020). Content validation through expert judgement of an instrument on the nutritional knowledge, beliefs, and habits of pregnant women. *Nutrients*, *12*(4), 1-13. <a href="https://doi.org/10.3390/nu12041136">https://doi.org/10.3390/nu12041136</a>
- Fein, R., Vossekuil, B., Pollack, W., Borum, R., Modzeleski, W., & Reddy, M. (2002). *Threat assessment in schools: A guide to managing threatening situations and to creating safe school climates*. U.S. Secret Service and Department of Education.

  <a href="https://www2.ed.gov/admins/lead/safety/threatassessmentguide.pdf">https://www2.ed.gov/admins/lead/safety/threatassessmentguide.pdf</a>
- Field, A. (2013). Discovering statistics using IBM SPSS statistics. (4th ed.). Sage.

- Fisher, L. (2019). Psychology and criminal justice can only take us so far: The value and need for a social psychological perspective in studies of American school violence. In G. A. Crews (Ed.), *Handbook of Research on School Violence in America* (pp. 121-138). IGI Global.
- Fives, C. J., Kong, G., Fuller, J. R., & DiGiuseppe, R. (2011). Anger, aggression, and irrational beliefs in adolescents. *Cognitive Therapy Research*, *35*(3), 199–208. <a href="https://doi.org/10.1007/s10608-009-9293-3">https://doi.org/10.1007/s10608-009-9293-3</a>
- Foster, S., Rollefson, M., Doksum, T., Noonan, D., Robinson, G., & Teich, J. (2005). *School mental health services in the United States*, 2002–2003. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

  <a href="https://files.eric.ed.gov/fulltext/ED499056.pdf">https://files.eric.ed.gov/fulltext/ED499056.pdf</a>
- Frey, A., Ruchkin, V., Martin, A., & Schwab-Stone, M. (2009). Adolescents in transition: School and family characteristics in the development of violent behaviors entering high school.

  \*Child Psychiatry and Human Development, 40(1), 1–13. <a href="https://doi.org/10.1007/s10578-008-0105-x">https://doi.org/10.1007/s10578-008-0105-x</a>
- Furlong, M., & Morrison, G. (2000). The school in school violence: Definitions and facts. *Journal of Emotional and Behavioral Disorders*, 8(2), 71–82. <a href="https://doi.org/10.1177/">https://doi.org/10.1177/</a>

  106342660000800203
- Garran, A. M., & Rasmussen, B. M. (2014). Safety in the classroom: Reconsidered. *Journal of Teaching in Social Work*, *34*(4), 401-412. <a href="https://doi.org/10.1080/08841233.2014.937517">https://doi.org/10.1080/08841233.2014.937517</a>
- Gaudiano, N., & Mitchell, T. (2017, November). Timeline: How Congress has responded to mass shootings and gun control legislation. *USA Today*. <a href="https://www.usatoday.com/pages/interactives/news/gun-control-mass-killings-timeline/">https://www.usatoday.com/pages/interactives/news/gun-control-mass-killings-timeline/</a>

- Geeraerts, S. B. (2012). Digital radicalization of youth. *Social Cosmos*, 3(1), 25-32.
- Gelin M. N., Beasley, T. M., & Zumbo, B. D. (2003). What is the impact on scale reliability and exploratory factor analysis of a Pearson correlation matrix when some respondents are not able to follow the rating scale? In B. D. Zumbo & C. O. Ochieng (Chairs), *The impact of Likert or rating scale mis-responding on commonly used statistical methods*[Symposium]. American Educational Research Association (AERA) annual meeting, Chicago, Illinois.
- George, C., Kaplan, N., & Main, M. (1996). *Adult attachment interview* [Unpublished manuscript]. Department of Psychology, University of California, Berkely (3rd ed.).
- Gerald, F. J., Whitfield, K. C., Porter, L. E., & Browne, K. D. (2016). Offenders and offence characteristics of school shooting incidents. *Journal of Investigative Psychology and Offender Profiling*, 13(1), 22-38. https://doi.org/10.1002/jip.1439
- Geschwind, N., Arntz, A., Bannink, F., & Peeters, F. (2019). Positive cognitive behavior therapy in the treatment of depression: A randomized order within-subject comparison with traditional cognitive behavior therapy. *Behaviour Research and Therapy*, *116*, 119-130. https://doi.org/10.1016/j.brat.2019.03.005
- Goforth, P. A. (2019). School shootings: Lessons from the past, and are we doomed to repeat them? In G. A. Crews (Ed.), *Handbook of research on school violence in America* (pp. 52-73). IGI Global.
- Goldweber, A., Waasdorp, T. E., & Bradshaw, C. P. (2013). Examining associations between race, urbanicity, and patterns of bullying involvement. *Journal of Youth and Adolescence*, 42(2), 206-219. http://dx.doi.org/10.1007/s10964-012-9843-y

- Goodman-Scott, E., Donohue, P., & Betters-Bubon, J. (2019). The case for the universal mental health screening in schools. *Counseling Today*. <a href="https://ct.counseling.org/2019/09/the-case-for-universal-mental-health-screening-in-schools/">https://ct.counseling.org/2019/09/the-case-for-universal-mental-health-screening-in-schools/</a>
- Goodrum, S., & Woodward, W. (2016). Report on the Arapahoe high school shooting: Lessons learned on information sharing, threat assessment, and systems integrity. University of Colorado's Center for the Study and Prevention of Violence. <a href="https://cspv.colorado.edu/wpcontent/uploads/2019/03/Report\_on\_the\_Arapahoe\_High\_School\_Shooting\_FINAL.p">https://cspv.colorado.edu/wpcontent/uploads/2019/03/Report\_on\_the\_Arapahoe\_High\_School\_Shooting\_FINAL.p</a>
- Goodrum, S., Thompson, A. J., Ward, K. C., & Woodward, W. (2018). A case study on threat assessment: Learning critical lessons to prevent school violence. *Journal of Threat Assessment and Management*, 5(3), 121-136. <a href="https://doi.org/10.1037/tam0000104">https://doi.org/10.1037/tam0000104</a>
- Gravetter, F. J., & Wallnau, L. B. (2013). *Statistics for the behavioral sciences*. (9th ed.). Wasworth, Cengage Learning.
- Harlow, K., & Roberts, R. A. (2010). An exploration of the relationship between social and psychological factors of being bullied. *Children & Schools*, 32(1), 15-26. https://doi.org/10.1093/cs/32.1.3
- Hastings, T. L. (1997). The screen for adolescent violence exposure (SAVE): Development and validation (Publication No. 6488) [Doctoral dissertation, Louisiana State University].
   LSU Historical Dissertations and Theses. 6488. <a href="https://digitalcommons.lsu.edu/grad-school\_disstheses/6488">https://digitalcommons.lsu.edu/grad-school\_disstheses/6488</a>
- Heron, M. (2019). Deaths: Leading causes for 2017. *National Vital Statistics Reports*, 68(6), 1-77. National Center for Health Statistics.

- Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. *Research in Nursing & Health*, *31*, 180-191. <a href="https://doi.org/10.1002/nur.20247">https://doi.org/10.1002/nur.20247</a>
- Hirschi, T. (1969). Causes of delinquency. University of California Press.
- Hirschi, T. (2002). Causes of delinquency. (2nd ed.). Taylor & Francis.
- Hong, J. S., Ryou, B., Wei, H-S., Allen-Meares, P., & Espelage, D. (2019). Identifying protective factors that potentially buffer the association between peer victimization and weapon-carrying behavior among US adolescents. *School Psychology International*, 40(4), 381-402. https://doi.org/10.1177/0143034319843964
- Hoover, S. A., Sapere, H., Lang, J. M., Nadeem, E., Dean, K. L., & Vona, P. (2018). Statewide implementation of an evidence based trauma intervention in schools. *School Psychology Quarterly*, *33*(1), 44-53. <a href="https://doi.org/10.1037/spq0000248">https://doi.org/10.1037/spq0000248</a>
- Houston Community Demonstration Project. Houston, TX: City of Houston Health and Human Services Department, 1993. (Unpublished).
- Hudson, P. E., Windham, R. C., & Hooper, L. M. (2005). Characteristics of school violence and the value of family-school therapeutic alliances. *Journal of School Violence*, 4(2), 133-146. <a href="https://doi.org/10.1300/J202v04n02\_08">https://doi.org/10.1300/J202v04n02\_08</a>
- Huijsmans, T., Eichelsheim, V. I., Weerman, F., Branje, S. T., & Meeus, W. (2019). The role of siblings in adolescent delinquency next to parents, school, and peers: Do gender and age matter? *Journal of Developmental and Life-Course Criminology*, 5, 220-242.
  <a href="https://doi.org/10.1007/s40865-018-0094-9">https://doi.org/10.1007/s40865-018-0094-9</a>
- Hutcheson, G., & Sofroniou, N. (1999). The multivariate social scientist. Sage.

- International Association of Chiefs of Police. (IACP, 2009). *Guide for preventing and responding to school violence*. (2nd eds.). <a href="https://bja.ojp.gov/sites/g/files/xyckuh">https://bja.ojp.gov/sites/g/files/xyckuh</a>
  186/files/Publications/IACP\_School\_Violence.pdf
- Janosz, M., Archambault, I., Pagani, L. S., Pascal, S., Morin, A. J. S., & Bowen, F. (2008). Are there detrimental effects of witnessing school violence in early adolescence? *Journal of Adolescent Health*, 43(6), 600-608. <a href="https://doi.org/10.1016/j.jadohealth.2008.04.011">https://doi.org/10.1016/j.jadohealth.2008.04.011</a>
- Jenchura, E. C., Gonzales, N. A., Tein, J.-Y., & Luecken, L. J. (2017). Gender and the interplay of source of support and peer social rejection on internalizing among Mexican American youth. *Journal of Youth and Adolescence*, 46(4), 787–800.

  https://doi.org/10.1007/s10964-016-0589-9
- Juvonen, J., & Graham, S. (2014). Bullying in schools: The power of bullies and the plight of victims. *Annual Review of Psychology*, 65, 159-185. <a href="https://doi.org/10.1146/annurev-psych-010213-115030">https://doi.org/10.1146/annurev-psych-010213-115030</a>
- k12 Academics. (n.d.). *History of school shootings in the United States*.

  https://www.k12academics.com/school-shootings/history-school-shootings-united-states
- Kempf-Leonard, K., & Morris, N. A. (2017). Social control theory. In *Oxford bibliographies*online. <a href="https://www.oxfordbibliographies.com/view/document/obo-9780195396607/obo-9780195396607-0091.xml">https://www.oxfordbibliographies.com/view/document/obo-9780195396607/obo-9780195396607-0091.xml</a>
- King, B. R., & Boswell, J. F. (2019). Therapeutic strategies and techniques in early cognitive-behavioral therapy. *Psychotherapy*, *56*(1), 35–40. <a href="https://doi.org/10.1037/pst0000202">https://doi.org/10.1037/pst0000202</a>
- King, S., & Bracy, N. L. (2019). School security in the post-Columbine era: Trends, consequences, and future directions. *Journal of Contemporary Criminal Justice*, 35(3), 274–295. https://doi.org/10.1177/1043986219840188

- Krueger, R. F., Derringer, J., Markon, K. E., Watson, D., & Skodol, A. E. (2012). Initial construction of a maladaptive personality trait model and inventory for DSM5. Psychological medicine, 42(9), 1879–1890. <a href="https://doi.org/10.1017/S0033291">https://doi.org/10.1017/S0033291</a>
  711002674
- Kokkinos, C. M., Algiovanoglou, I., & Voulgaridou, I. (2019). Emotion regulation and relational aggression in adolescents: Parental attachment as moderator. *Journal of Child and Family Stud*ies, 28(11), 3146–3160. https://doi.org/10.1007/s10826-019-01491-9
- Kuperminc, G. P., Leadbeater, B. J., & Blatt, S. J. (2001). School social climate and individual differences in vulnerability to psychopathology among middle school students. *Journal of School Psychology*, 39(2), 141-159. https://doi.org/10.1016/S0022-4405(01)00059-0
- Laerd Statistics. (2018). *Pearson product-moment correlation*. Lund research ltd.

  <a href="https://statistics.laerd.com/statistical-guides/pearson-correlation-coefficient-statistical-guide.php">https://statistics.laerd.com/statistical-guides/pearson-correlation-coefficient-statistical-guide.php</a>
- Laible, D. J., Carlo, G., & Raffaelli, M. (2000). The differential relations of parent and peer attachment to adolescent adjustment. *Journal of Youth and Adolescence*, 29(1), 45-59. https://doi.org/10.1023/A:1005169004882
- Laird, R. D., Pettit, G. S., Dodge, K. A., & Bates, J. E. (2003). Change in parents' monitoring knowledge: Links with parenting, relationship quality, adolescent beliefs, and antisocial behavior. *Social Development*, *12*(3), 401-419. <a href="https://doi.org/10.1111/1467-9507.00240">https://doi.org/10.1111/1467-9507.00240</a>
- Lane, K. L., Menzies, H. M., Oakes, W. P., Lambert, W., Cox, M., & Hankins, K. (2012). A validation of the student risk screening scale for internalizing and externalizing behaviors: Patterns in rural and urban elementary schools. *Behavioral Disorders*, 37(4), 244-270. <a href="https://www.jstor.org/stable/43153560">https://www.jstor.org/stable/43153560</a>

- Lane, L. K., Oakes, W. P., Cantwell, E. D., Schatschneider, C., Menzies, H., Crittenden, M., & Messenger, M. (2016). Student risk screening scale for internalizing and externalizing behaviors: Preliminary cut scores to support data-informed decision making in middle and high schools. *Behavioral Disorders*, 42(1), 271-284. <a href="https://doi.org/10.17988/bd-16-115.1">https://doi.org/10.17988/bd-16-115.1</a>
- Langman, P. (2009). Rampage school shooters: A typology. *Aggression and Violent Behavior*, 14(1), 79–86. https://doi.org/10.1016/j.avb.2008.10.003
- Lankford, A. (2012). A comparative analysis of suicide terrorists and rampage, workplace, and school shooters in the United States from 1990 to 2010. *Homicide Studies*, *17*(3), 255-274. https://doi.org/10.1177/1088767912462033
- Lawson, G. (n.d.). Support following school shootings. School Counselor Connection: American Counseling Association. <a href="https://www.counseling.org/docs/default-source/school-counseling/shootings-schoolcounselorconnection.pdf?sfvrsn=807b562c\_2">https://www.counseling.org/docs/default-source/school-counselorconnection.pdf?sfvrsn=807b562c\_2</a>
- Lee, R. (2017). Mistrustful and misunderstood: A review of paranoid personality disorder.

  \*Current Behavioral Neuroscience Reports, 4(2), 151-165. <a href="https://doi.org/">https://doi.org/</a>

  \*10.1007/s40473-017- <a href="https://doi.org/">0116-7</a>
- Lee, C. H., & Song, J. (2012). Functions of parental involvement and effects of school climate on bullying behaviors among South Korean middle school students. *Journal of Interpersonal Violence*, 27(12), 2437-2464. <a href="http://dx.doi.org/10.1177/0886260511433508">http://dx.doi.org/10.1177/0886260511433508</a>
- Leedy, P. D., & Ormond, J. E. (2010). *Practical research: Planning and design*. (9th ed.). Pearson Education, Inc.

- Lester, L., & Cross, D. (2015). The relationship between school climate and mental and emotional wellbeing over the transition from primary to secondary school. *Psychology of Well-Being*, *5*(9), 1-15. https://doi.org/10.1186/s13612-015-0037-8
- Leuschner, V., Bondu, R., Schroer-Hippel, M., Panno, J., Neumetzler, K., Fisch, S., School, J., & Scheithauer, H. (2011). Prevention of homicidal violence in schools in Germany: The Berlin leaking project and the networks against school shootings project (NETWASS).

  New Directions in Youth Development, 129, 61–78. https://doi.org/10.1002/yd.387
- Leuschner, V., Fiedler, N., Schultze, M., Ahlig, N., Göbel, K., Sommer, F., Scholl, J., Cornell,
  D., & Scheithauer, H. (2017). Prevention of targeted school violence by responding to students' psychosocial crises: The NETWASS program. *Child Development*, 88(1), 68-82. <a href="https://doi-org.ezproxy.uno.edu/10.1111.cdev.12690">https://doi-org.ezproxy.uno.edu/10.1111.cdev.12690</a>
- Li, D., Chu, C. M., Xu, X., Zeng, G., & Ruby, K. (2019). Risk and protective factors for probation success among youth offenders in Singapore. *Youth Violence and Juvenile Justice*, 17(2), 194-213. <a href="https://doi.org/10.1177/1541204018778887">https://doi.org/10.1177/1541204018778887</a>
- Like, T. Z., & Cobbina, J. E. (2018). Emotional girls and rational boys: The gendering of violence among urban, African American Youth. *Crime and Delinquency*, 65(3), 295– 321. <a href="https://doi.org/10.1177/0011128718811002">https://doi.org/10.1177/0011128718811002</a>
- Livingston, M. D., Rossheim, M. E., & Hall, K. S. (2019). A descriptive analysis of school and school shooter characteristics and the severity of school shootings in the United States, 1999-2018. *Journal of Adolescent Health*, 64(6), 797–799. <a href="https://doi.org/10.1016/j.jadohealth.2018.12.006">https://doi.org/10.1016/j.jadohealth.2018.12.006</a>
- Liu, J. (2004). Childhood externalizing behavior: Theory and implications. *Journal of Child and Adolescent Psychiatric Nursing: official publication of the Association of Child and*

- Adolescent Psychiatric Nurses, Inc, 17(3), 93–103. https://doi.org/10.1111/j.1744-6171.2004.tb00003.x
- Liu, J., Chen, X., & Lewis, G. (2011). Childhood internalizing behaviour: Analysis and implications. *Journal of Psychiatric and Mental Health Nursing*, *18*(10), 884–894. https://doi.org/10.1111/j.1365-2850.2011.01743.x
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4(1), 84-99. https://doi.org/1082-989X/99/53.00
- Main, M. (1995). Recent studies in attachment: Overview, with selected implications for clinical work. In S. Goldberg, R. Muir, & J. Kerr (Eds.) *Attachment theory: Social, developmental, and clinical perspectives* (pp. 407–474). Analytic Press.
- Malecki, C. K., Demaray, M. K., Coyle, S., Geosling, R., Rueger, S. Y., & Becker, L. D. (2015).
  Frequency, power differential, and intentionality: Relationship to anxiety, depression, and self-esteem for victims of bullying. *Child and Youth Care Forum*, 44(1), 1-28.
  <a href="https://doi.org/10.1007/s10566-014-9273-y">https://doi.org/10.1007/s10566-014-9273-y</a>
- Malkki, L. (2014). Political elements in post-Columbine school shootings in Europe and North America. *Terrorism and Political Violence*, 26(1), 185-201. <a href="https://doi.org/10.1080/09">https://doi.org/10.1080/09</a>
  546553.2014.849933
- Massing-Schaffer, M., Helms, S. W., Rudolph, K. D., Slavich, G. M., Hastings, P. D., Giletta, M...& Prinstein, M. T. (2019). Preliminary associations among relational victimization, targeted rejection, and suicidality in adolescents: A prospective study. *Journal of Clinical Child and Adolescent Psychology*, 48(2), 288-295. <a href="https://doi.org/10.1080/15374">https://doi.org/10.1080/15374</a>
  416.2018.1469093

- Mayer, M. J., & Jimerson, S. R. (2019). School safety and violence prevention: Science, practice, policy. American Psychological Association.
- McAdams, C., Shillingford, M. A., & Trice-Black, S. (2011). Putting research into practice in school violence prevention and intervention: How is school counseling doing? *Journal of School Counseling*, 9(2), 1-31.
- McCauley, C., & Moskalenko, S. (2008). Mechanisms of political radicalization: Pathways toward terrorism. *Terrorism and Political Violence*, 20(3), 415-433. https://doi.org/10.1080/09546550802073367
- McCauley, C., & Moskalenko, S. (2017). Understanding political radicalization: The two-pyramids model. *American Psychologist*, 72(3), 205-216. <a href="https://doi.org/10.1037/amp0000062">https://doi.org/10.1037/amp0000062</a>
- McCoy, S. S., Dimler, L. M., Samuels, D. V., & Natsuaki, M. N. (2019). Adolescent susceptibility to deviant peer pressure: Does gender matter? *Adolescent Research Review*, 4(1), 59–71. <a href="https://doi.org/10.1007/s40894-017-0071-2">https://doi.org/10.1007/s40894-017-0071-2</a>
- McGloin, J. M., & Thomas, K. (2019). Peer influence and delinquency. *Annual Review of Criminology*, 2, 241-264. https://doi.org/10.1146/annurev-criminol-011518-024551
- McMahon, S. D. (2020). The response to school violence is a major concern for teachers. *The Hill*. <a href="https://thehill.com/opinion/education/494476-the-response-to-school-violence-is-a-major-concern-for-teachers">https://thehill.com/opinion/education/494476-the-response-to-school-violence-is-a-major-concern-for-teachers</a>
- Melendez, M. S., Lichtenstein, B., & Dollivier, M. J. (2016). Mothers of mass murderers:

  Exploring public blame for the mothers of school shooters through the application of courtesy stigma to the Columbine and Newtown tragedies. *Deviant Behavior*, *37*(5), 1-12. <a href="https://doi.org/10.1080/01639625.2015.1060754">https://doi.org/10.1080/01639625.2015.1060754</a>

- Meloy, J. R., & O'Toole, M. E. (2011). The concept of leakage in threat assessment.

  \*Behavioral Science and the Law, 29(4), 513–527. <a href="https://doi.org/10.1002/bsl.986">https://doi.org/10.1002/bsl.986</a>
- Meloy, J. R., Hoffmann, J., Roshdi, K., & Guldimann, A. (2014). Some warning behaviors discriminate between school shooters and others students of concern. *Journal of Threat Assessment and Management*, 1(3), 203-211. http://dx.doi.org/10.1037/tam0000020
- Miller, P. A., & Esienberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin*, 103(3), 324-344.
- Mitchell, J. T., & Everly, G. S. (1996). *Critical incident stress debriefing: An operations manual*. Chevron.
- Mitchell, J. T., & Everly, G. S. (2010). A primer on critical incident stress management (CISM).

  International Critical Incident Stress Foundation, Inc.
- Mitchell, K. J., Jones, L. M., Turner, H., Blachman-Demner, D., & Kracke, K. (2016). *The role of technology in youth harassment victimization* (NCJ 250079). U.S. Department of Justice, Office of Justice Programs, National Institute of Justice and Office of Juvenile Justice and Delinquency Prevention.
- Moore, C. C., & Susan, M. K. (2015). Sonoma county school crisis response & recovery resource guide: Study guide, background, and references for best practices.

  <a href="https://www.scoe.org/blog\_files/SOS%20Response%20and%20Recovery%20Resource%20Guide%202017.pdf">https://www.scoe.org/blog\_files/SOS%20Response%20and%20Recovery%20Resource%20Guide%202017.pdf</a>
- Moretti, M. M., & Peled, M. (2004). Adolescent-parent attachment: Bonds that support healthy development. *Pediatrics & Child Health*, 9(8), 551–555. <a href="https://doi.org/10.1093/pch/9.8.551">https://doi.org/10.1093/pch/9.8.551</a>

- Morgado, F. R. R., Meireles, J. F. F., Neves, C. M., Amaral, A.C.S., & Ferreira, M. E. C. (2017).

  Scale development: Ten main limitations and recommendations to improve future research practices. *Psicollogia: Refexao e Critica, 30*(3), 1-20. <a href="https://doi.org/">https://doi.org/</a>
  10.1186/s41155-016-0057-1
- Morgan, R. E., & Oudekerk, B. A. (2019). Criminal victimization, 2018. *Bureau of Justice Statistics*. https://www.bjs.gov/content/pub/pdf/cv18.pdf
- Morrison, J. Q. (2007). Perceptions of teachers and staff regarding the impact of the critical incident stress management (CISM) model for school-based crisis intervention. *Journal of School Violence*, 6(1), 101-120. <a href="https://doi.org/101-120.10.1300/J202v06n01">https://doi.org/101-120.10.1300/J202v06n01</a> 07
- Moustakas, C. (1994). Phenomenological research methods. Sage Publications.
- Mrug, S., & Windle, M. (2010). Prospective effects of violence exposure across multiple contexts on early adolescents' internalizing and externalizing problems. *The Journal of Child Psychology and Psychiatry*, 51(8), 953-961. <a href="https://doi.org/10.1111/j.1469-7610.2010.02222.x">https://doi.org/10.1111/j.1469-7610.2010.02222.x</a>
- Mrug, S., Madan, A., & Windle, M. (2012). Temperament alters susceptibility to negative peer influence in early adolescence. *Journal of Abnormal Child Psychology*, 40(2), 201–209. https://doi.org/10.1007/s10802-011-9550-2
- Mullen, P., James, D., Meloy, J. R., Pathé, M., Farnham, F., Preston, L., Darnley, B., & Berman, J. (2009). The fixated and the pursuit of public figures. *Journal of Forensic Psychiatry* and *Psychology*, 20, 33–47. https://doi.org/10.1080/14789940802197074
- Musu, L., Zhang, A., Wang, K., Zhang, J., & Oudekerk, B.A. (2019). *Indicators of school crime and safety: 2018* (NCES 2019-047/NCJ 252571). National Center for Education

- Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice.
- Mynard, H., & Joseph, S. (2000). Development of the multidimensional peer-victimization scale. *Aggressive Behavior*, 26(2), 169–178. <a href="https://doi.org/10.1080/00221325.">https://doi.org/10.1080/00221325.</a>
  2015.1007915
- Nadeem, E., Jaycox, L. H., Kataoka, S. H., Langley, A. K., & Stein, B. D. (2011). Going to scale: Experiences implementing school-based trauma intervention. *School Psychology Review*, 40(4), 549-568. https://doi.org/10.1080/02796015.2011.12087529
- National Association of School Psychologist. (NASP, 2002). *Threat assessment: Predicting and preventing school violence*. https://www.naspcenter.org/factsheets/threatassess\_fs.html
- National Association of School Psychologist. (NASP, 2014). Threat assessment for school administrators & crisis teams. <a href="https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-climate-safety-and-crisis/systems-level-prevention/threat-assessment-at-school/threat-assessment-for-school-administrators-and-crisis-teams">https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-climate-safety-and-crisis/systems-level-prevention/threat-assessment-at-school/threat-assessment-for-school-administrators-and-crisis-teams</a>
- National Center for Education Statistics. (2022). *Characteristics of public school principals*. U.S. Department of Education, Institute of Education Sciences. <a href="https://nces.ed.gov/programs/coe/indicator/cls">https://nces.ed.gov/programs/coe/indicator/cls</a>
- National Center for Education Statistics. (n.d.). *Elementary/secondary information system*. <a href="https://nces.ed.gov/ccd/elsi/">https://nces.ed.gov/ccd/elsi/</a>
- National Center for School Mental Health. (n.d.). *Assessment library*. <a href="https://www.theshapesystem.com/assessmentlibrary/">https://www.theshapesystem.com/assessmentlibrary/</a>

- National Education Association. (NEA, 2018). *NEA's school crisis guide*. <a href="https://www.nea.org/sites/default/files/2020-07/NEA%20School%20Crisis%20Guide%202018.pdf">https://www.nea.org/sites/default/files/2020-07/NEA%20School%20Crisis%20Guide%202018.pdf</a>
- National Institute of Mental Health. (NIMH, 2019). *Suicide prevention*. <a href="https://www.nimh.nih">https://www.nimh.nih</a>. <a href="mailto:gov/health/topics/suicide-prevention">gov/health/topics/suicide-prevention</a>
- National Threat Assessment Center. (NTAC, 2020). *Mass attacks in public spaces 2019*.

  United States Secret Service, Department of Homeland Security.

  https://www.secretservice.gov/data/protection/ntac/MAPS2019.pdf
- Nunnaly, J. C. (1978). Psychometric theory. (2nd ed.). McGraw-Hill.
- O'Brennan, L., Furlong, M. J., & Yang, C. (2019). Promoting collaboration among education professionals to enhance school safety. In M. J. Mayer, & S. R. Jimerson (Eds.), *School safety and violence prevention: Science, practice, policy* (pp. 247-271). American Psychological Association.
- Office of Partner Engagement. (2016). *Preventing violent extremism in schools*. Federal Bureau of Investigation. <a href="https://rems.ed.gov/Docs/FBI\_PreventingExtremismSchools.pdf">https://rems.ed.gov/Docs/FBI\_PreventingExtremismSchools.pdf</a>
- O'Neill, J. M. (2002). Self-report student survey of violent attitudes and behaviors.

  Michigan Department of Community Health, Office of Drug Control Policy.
- O'Toole, M. E. (2000). *The school shooter: A threat assessment perspective*. Federal Bureau of Investigation.
- Olweus, D. (1994). Annotation: Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry*, *35*, 1171-1190.
- Oosterhoff, B., Ferris, K. A., Palmer, C. A., & Metzger, A. (2017). Longitudinal associations among adolescents' organized activity involvement and sociopolitical values. *Social Development*, 26(4), 846–859. https://doi-org.ezproxy.uno.edu/10.1111/sode.12230

- Orzechowska, A., Zajaczkoska, M., Talarowska, M., & Galecki, P. (2013). Depression and ways of coping with stress: A preliminary study. *Medical Science Monitor*, 19, 1050-1056. <a href="https://doi.org/10.12659/MSM.889778">https://doi.org/10.12659/MSM.889778</a>
- Ozer, E. J., & Weinstein, R. S. (2010). Urban adolescents' exposure to community violence: The role of support, school safety, and social constraints in a school-based sample of boys and girls. *Journal of Clinical Child & Adolescent Psychology*, 33(3), 463-476.

  <a href="https://doi.org/10.1207/s15374424jccp3303\_4">https://doi.org/10.1207/s15374424jccp3303\_4</a></a>
- Palomares Ruiz, A., Oteiza-Nascimento, A., Toldos, M. P., Serrano-Marugán, I., & Martín-Babarro, J. (2018). Bullying and depression: The moderating effect of social support, rejection and victimization profile. *Anales De Psicología / Annals of Psychology*, 35(1), 1-10. <a href="https://doi.org/10.6018/analesps.35.1.301241">https://doi.org/10.6018/analesps.35.1.301241</a>
- Peterson, T., & Dutton, C. (2019, April). Adolescent perfection driven distress: Cultivating social and emotional competency. Poster session presented at Student Creative Arts and Research Symposium, Texas.
- Perez, N. M., Jennings, W. G., & Baglivio, M. T. (2018). A path to serious, violent, chronic delinquency: The harmful aftermath of adverse childhood experiences. *Crime & Delinquency*, 64(1), 3–25. https://doi.org/10.1177/0011128716684806
- Pine, D. S., Cohen, P., Gurley, D., Brook, J., & Ma, Y. (1998) The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Archives of General Psychiatry*, 55(1), 56–64. <a href="https://doi.org/10.1001/archpsyc.55.1.56">https://doi.org/10.1001/archpsyc.55.1.56</a>
- Pilkonis, P. A., Choi, S. W., Reise, S. P., Stover, A. M., Riley, W. T., Cella, D., & PROMIS Cooperative Group. (2011). Item banks for measuring emotional distress from the

- patient-reported outcomes measurement information system (PROMIS®): Depression, anxiety, and anger. *Assessment*, 18(3), 263–283. <a href="https://doi.org/10.1177/10731911">https://doi.org/10.1177/10731911</a>
  11411667
- Poland, S., & Conte, C. (n.d.). School shootings and solutions. <a href="https://www.lispan.org/Sch">https://www.lispan.org/Sch</a>
  ool%20Shootings%20&%20Solutions.pdf
- Powers, C. J., & Bierman, K. L. (2012). The multifaceted impact of peer relations on aggressive-disruptive behavior in early elementary school. *Developmental Psychology*, 49(6), 1174-1186. <a href="https://doi.org/10.1037/a0028400">https://doi.org/10.1037/a0028400</a>
- Prince-Embury, S. (2006). Resiliency scales for children and adolescents. Pearson.

  <a href="https://www.pearsonclinical.co.uk/Psychology/ChildMentalHealth/ChildPsychopathology/ResiliencyScalesforChildrenandAdolescents/ResiliencyScalesfo
- Prinstein, M. J., & Dodge, K. A. (2008). *Understanding peer influence in children and adolescents*. Guilford.
- Ramirez, M., Harland, K., Frederick, M., Shepherd, R., Wong, M., & Cavanaugh, J. E. (2013).

  Listen protect connect for traumatized school children: A pilot study of psychological first aid. *BMC Psychology*, 1(26), 1-9. <a href="https://doi.org/10.1186/2050-7283-1-26">https://doi.org/10.1186/2050-7283-1-26</a>
- Reddy, M., Borum, R., Vossekuil, B., Fein, R., Berglund, J., & Modzeleski, W. (2001).

  Evaluating risk for targeted violence in schools: Comparing risk assessment, threat assessment, and other approaches. *Psychology in the Schools*, *38*, 157–172.

  <a href="https://doi.org/10.1002/pits.1007">https://doi.org/10.1002/pits.1007</a>

- Reeves, M. A. L., & Brock, S. E. (2017). School behavioral threat assessment and management.

  \*Contemporary School Psychology, 22(2), 148-162. <a href="https://doi.org10.1007/s40688-017-0158-6">https://doi.org10.1007/s40688-017-0158-6</a>

  \*Ontemporary School Psychology, 22(2), 148-162. <a href="https://doi.org10.1007/s40688-017-0158-6">https://doi.org10.1007/s40688-017-0158-6</a>
- Reynolds, C. R., & Kamphaus, R. W. (2015). *Behavior assessment system for children, third edition (BASC-3)*. <a href="https://www.pearsonclinical.co.uk/Psychology/ChildMentalHealth/">https://www.pearsonclinical.co.uk/Psychology/ChildMentalHealth/</a>

  <u>ChildADDADHDBeh aviour/basc3/behavior-assessment-system-for-children-third-edition.aspx</u>
- Rosen, L. H., Beron, K. J., & Underwood, M. K. (2013). Assessing peer victimization across adolescence: Measurement invariance and developmental change. *Psychological Assessment*, 25(1), 1–11. https://doi.org/10.1037/a0028985
- Rossen, E., & Cowan, K. C. (2014). Improving mental health in schools. *Phi Delta Kappan*, 96(4), 8–13. https://doi.org/10.1177/0031721714561438
- Rowling, L., & Weist, M. (2004). Promoting the growth, improvement and sustainability of school mental health programs worldwide. *International Journal of Mental Health Promotion*, 6(2), 3–11. <a href="https://doi.org/10.1080/14623730.2004.9721925">https://doi.org/10.1080/14623730.2004.9721925</a>
- Saetren, S. S., Sütterlin, S., Lugo, R. G., Prince-Embury, S., & Makransky, G. (2019). A multilevel investigation of resiliency scales for children and adolescents: The relationship between self-perceived emotion regulation, vagally mediated heart rate variability, and personal factors associated with resilience. *Frontiers in Psychology*, 10(438), 1-12. https://doi.org/10.3389/fpsyg.2019.00438
- Safe Havens International. (2016). Post-incident review: Arapahoe high school active-shooter incident. <a href="https://safehavensinternational.org/wp-content/uploads/SHI-AHS\_Post-Incident\_Review.pdf">https://safehavensinternational.org/wp-content/uploads/SHI-AHS\_Post-Incident\_Review.pdf</a>

- Salem Keizer School District. (n.d.). *Threat assessment and management system: Systems guide*. https://www.studentthreatassessment.org/stas-systems-guide
- Salmivalli, C., & Peets, K. (2018). Bullying and victimization. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (p. 302–321). The Guilford Press.
- Santiago, C. D., Raviv, T., Ros, A. M., Distel, L. M. L., Torres, S. A., Fuller, A. K., Coyne, C.
   A., Cicchetti, C., & Langley, A. (2018). Implementing the bounce back trauma intervention in urban elementary schools: A real world replication trial. *School Psychology Quarterly*, 33(1), 1-9. <a href="https://doi.org/10.1037/spq0000229">https://doi.org/10.1037/spq0000229</a>
- Schaeffer, K. (2021, December 10). America's public school teachers are far less racially and ethnically diverse than their students. *Pew Research Center*.

  <a href="https://www.pewresearch.org/fact-tank/2021/12/10/americas-public-school-teachers-are-far-less-racially-and-ethnically-diverse-than-their-students/">https://www.pewresearch.org/fact-tank/2021/12/10/americas-public-school-teachers-are-far-less-racially-and-ethnically-diverse-than-their-students/</a>
- Schneller, J. (2005). *Psychosocial evaluation and threat risk assessment*. Psychological Assessment Resources, Inc.
- Schonfeld, D. J., & Newgass, S. (2003). *School crisis response initiative*. Yale University Child Study Center, National Center for Children Exposed to Violence.

  https://www.ovc.gov/publications/bulletins/schoolcrisis/ncj197832.pdf
- Schreiber, M., Gurwitch, R. H., & Wong, M. (2006). Listen, protect, and connect-model & teach: Psychological first aid for teachers and schools. United States Federal Emergency Management Agency.

- Schulte-Körne, G. (2016). Mental health problems in a school setting in children and adolescents. *Deutsches Arzteblatt international*, 113(11), 183–190. <a href="https://doi.org/10.3238/arztebl.2016.0183">https://doi.org/10.3238/arztebl.2016.0183</a>
- Seo, E., Patall, E. A., Henderson, M. D., & Steingut, R. R. (2018). The effects of goal origin and implementation intentions on goal commitment, effort, and performance. *Journal of Experimental Education*, 86(3), 386–401. <a href="https://doi.org/10.1080/00220973.">https://doi.org/10.1080/00220973.</a>
  2016.1277334
- Sentse, M., Lindenberg, S., Omvlee, A., Ormel, J., & Veenstra, R. (2010). Rejection and acceptance across contexts: Parents and peers as risks and buffers for early adolescent psychopathology. The TRAILS study. *Journal of Abnormal Child Psychology*, *38*(1), 119–130. <a href="https://doi.org/10.1007/s10802-009-9351-z">https://doi.org/10.1007/s10802-009-9351-z</a>
- Shaughnessy, M. F., & Johnson, A. (2019). Depression and suicide: The need for awareness of signs of suicidal cognitions and lethality. *Journal of Advances in Medicine and Medical Research*, 29(8), 1-8. <a href="https://doi.org/10.9734/jammr/2019/v29i830109">https://doi.org/10.9734/jammr/2019/v29i830109</a>
- Siceloff, E. R., Bradley, W. J., & Flory, K. (2017). Universal behavioral/emotional health screening in schools: Overview and feasibility. *Report on Emotional & Behavioral Disorders in Youth*, 17(2), 32–38.
- Siegel, L. J., & McCormick, C. R. (2006). *Criminology in Canada: Theories, patterns, and typologies* (6th eds.). Thomson Nelson.
- Silver, J., Simons, A., & Craun, S. (2018). A study of the pre-attack behaviors of active shooters in the United States: Between 2000 and 2013. Federal Bureau of Investigation, U.S. Department of Justice.

- Simpson, J. A., Griskevicius, V., Kuo, S. I., Sung, S., & Collins, W. A. (2012). Evolution, stress, and sensitive periods: The influence of unpredictability in early versus late childhood on sex and risky behavior. *Developmental Psychology*, 48(3), 674–686.

  https://dx.doi.org/10.1037/a0027293
- Sommer, F., Leuschner, V., & Scheithauer, H. (2014). Bullying, romantic rejection, and conflicts with teachers: The crucial role of social dynamics in the development of school shootings—A systematic review. *International Journal of Developmental Science*, 8(1-2), 3–24. https://doi.org/10.3233/DEV-140129
- Stancliffe, R. J., Wiese, M. Y., Read, S., Jeltes, G., & Clayton, J. M. (2017). Assessing knowledge and attitudes about end of life: Evaluation of three instruments designed for adults with intellectual disability. *Journal of Applied Research in Intellectual Disabilities*, 30(6), 1076–1088. https://doi-org.ezproxy.uno.edu/10.1111/jar.12358
- Stevens, J. P. (2002). Applied multivariate statistics for the social sciences. (4th ed.). Erlbaum.
- Stolarova, M., Wolf, C., Rinker, T., & Brielmann, A. (2014). How to assess and compare interrater reliability, agreement and correlation of ratings: An exemplary analysis of mother-father and parent-teacher expressive vocabulary rating pairs. *Frontiers in Psychology*, 5(509), 1-13. https://doi.org/10.3389/fpsyg.2014.00509
- Storch, E. A., Brassard, M. R., & Masia-Warner, C. L. (2003). The relationship of peer victimization to social anxiety and loneliness in adolescence. *Child Study Journal*, 33(1), 1-18.
- Studer, J. R., & Salter, S. E. (2010). The role of the school counselor in crisis planning and intervention. <a href="https://counselingoutfitters.com/vistas/vistas10/Article\_92.pdf">https://counselingoutfitters.com/vistas/vistas10/Article\_92.pdf</a>

- Systematic screening for behavior disorders. (SSBD, n.d.). Cengage.

  <a href="https://college.cengage.com/education/salvia/assessment/10e/resources/salvia\_test\_syste">https://college.cengage.com/education/salvia/assessment/10e/resources/salvia\_test\_syste</a>

  matic\_screening.pdf
- Terzian, M., Hamilton, K., & Ericson, S. (2011). What works to prevent or reduce internalizing problems or socio-emotional difficulties in adolescents: Lessons from experiential evaluations of social interventions. *Child Trends*. <a href="https://www.childtrends.org/wp-content/uploads/2013/06/2011-34DUPWhatWorksSocio-Emotional.pdf">https://www.childtrends.org/wp-content/uploads/2013/06/2011-34DUPWhatWorksSocio-Emotional.pdf</a>
- Tobin, D. L. (1991). *User's manual for the coping strategies inventory*. Ohio University, Athens: Unpublished manuscript.
- Tomé, G., de Matos, M. G., Camacho, I., Simões, C., & Diniz, J. A. (2012). Portuguese adolescents: The importance of parents and peer groups in positive health. *The Spanish Journal of Psychology*, *15*(3), 1315–1324. <a href="https://doi.org/10.5209/rev\_sjop.">https://doi.org/10.5209/rev\_sjop.</a>
  2012.v15.n3.39417
- Tran, T., Nguyen, T., & Chan, K. (2017). *Developing cross-cultural measurement in social work* research and evaluation (2nd ed.). Oxford University Press.
- Trip, S., Bora, C. H., Marian, M., Halmajan, A., & Drugas, M. I. (2019). Psychological mechanisms involved in radicalization and extremism. A rational emotive behavioral conceptualization. *Frontiers in Psychology*, 10(437), 1-8. <a href="https://doi.org/10.338">https://doi.org/10.338</a>
  9/fpsyg.2019.00437
- Turygin, N. C., Matson, J. L., Adams, H., & Belva, B. (2013). The effect of DSM-5 criteria on externalizing, internalizing, behavioral and adaptive symptoms in children diagnosed with autism. *Developmental Neurorehabilitation*, 16(4), 277–282. <a href="https://doi.org/10.3109/17518423.2013.769281">https://doi.org/10.3109/17518423.2013.769281</a>

- United Nations Educational, Scientific and Cultural Organization. (UNESCO, 2017). *Preventing violent extremism through education: A guide for policy-makers*.

  <a href="https://unesdoc.unesco.org/ark:/48223/pf0000247764">https://unesdoc.unesco.org/ark:/48223/pf0000247764</a>
- United States Government Accountability Office. (2020). *K-12 education: Characteristics of school shootings*. https://www.gao.gov/assets/gao-20-455.pdf
- Varela, J. J., Sirlopú, D., Melipillán, R., Espelage, D., Green, J., & Guzmán, J. (2019). Exploring the influence school climate on the relationship between school violence and adolescent subjective well-being. *Child Indicators Research*, *12*(1), 2095-2110. <a href="https://doi.org/10.1007/s12187-019-09631-9">https://doi.org/10.1007/s12187-019-09631-9</a>
- van den Bos, K. (2020). Unfairness and radicalization. *Annual Review of Psychology*, 71(1), 563-588. <a href="https://doi.org/10.1146/annurev-psych-010419-050953">https://doi.org/10.1146/annurev-psych-010419-050953</a>
- Van Dreal, J. (2011). Assessing student threats: A handbook for implementing the Salem-Keizer system. Rowman & Littlefield.
- Van Dreal, J., Safety and Risk Management Services, & Salem Keizer Public Schools. (2017).

  SB 414, state wide threat assessment system frequently asked questions.

  <a href="https://olis.leg.state.or.us/liz/2017R1/Downloads/CommitteeMeetingDocument/98545">https://olis.leg.state.or.us/liz/2017R1/Downloads/CommitteeMeetingDocument/98545</a>
- Viechtbauer, W., Smits, L., Kotz, D., Budé, L., Spigt, M., Serroyen, J., & Crutze, R. (2015). A simple formula for the calculation of sample size in pilot studies. *Journal of Clinical Epidemiology*, 68(11), 1375-1379. <a href="https://doi.org/10.1016/j.jclinepi.2015.04.014">https://doi.org/10.1016/j.jclinepi.2015.04.014</a>
- Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. (2002). The final report and findings of the safe school initiative: Implications for the prevention of school attacks in the United States. United Stated Secret Service and United States Department of Education. <a href="https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf">https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf</a>

- Vrbnjak, D., Pahor, D., Nelson, J. W., & Pajnkihar, M. (2016). Content validity, face validity, and internal consistency of the Slovene version of caring factor survey for care providers, caring for co-workers and caring of managers. *Scandinavian Journal of Caring Sciences*, 31(2), 395-404. https://doi.org/10.1111/scs.12338
- Walker, H. M., Severson, H. H., & Feil, E. G. (2014). Systematic screening for behavior disorders (SSBD): Administrator's guide. (2nd ed.).
  <a href="https://www.ancorapublishing.com/wp-content/uploads/2018/08/SSBD\_Portfolio.pdf">https://www.ancorapublishing.com/wp-content/uploads/2018/08/SSBD\_Portfolio.pdf</a>
- Watson, T., & McLanahan, S. (2011). Marriage meets the Joneses: Relative income, identity, and marital status. *Journal of Human Resources*, 46, 482–517. <a href="https://www.jstor.org">https://www.jstor.org</a> /stable/41304829
- Wiatrowski, M., Griswold, D., & Roberts, M. (1981). Social control theory and delinquency.

  \*American Sociological Review, 46(5), 525-541. <a href="http://www.jstor.org/stable/2094936">http://www.jstor.org/stable/2094936</a>
- Willner, C. J., Gatzke-Kopp, L. M., & Bray, B. C. (2016). The dynamics of internalizing and externalizing comorbidity across the early school years. *Development and Psychopathology*, 28(4pt1), 1033–1052. <a href="https://doi.org/10.1017/S0954579416000687">https://doi.org/10.1017/S0954579416000687</a>
- Wojcieszak, M. (2010). 'Don't talk to me': Effects of ideologically homogeneous online groups and politically dissimilar offline ties on extremism. *New Media & Society*, *12*(4), 637–655. <a href="https://doi.org/10.1177/1461444809342775">https://doi.org/10.1177/1461444809342775</a>
- Youngstrom, E., Weist, M. D., & Albus, K. E. (2003). Exploring violence exposure, stress, protective factors and behavioral problems among inner-city youth. *American Journal of Community Psychology*, 32(1-2), 115-129. https://doi.org/10.1023/A:1025607226122
- Youth.gov. (n.d.). Safe youth, safe schools. <a href="https://youth.gov/feature-article/safe-youth-safe-schools">https://youth.gov/feature-article/safe-youth-safe-schools</a>. <a href="https://youth.gov/feature-article/safe-youth-safe-schools">https://youth.gov/feature-article/safe-youth-safe-you

- Zahn–Waxler, C., Klimes-Dougan, B., & Slattery, M. (2000). Internalizing problems of childhood and adolescence: Prospects, pitfalls, and progress in understanding the development of anxiety and depression. *Development and Psychopathology*, 12(3), 443-466. https://doi.org/10.1017/S0954579400003102
- Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar,
   A. R. (2015). Design and implementation content validity study: Development of an instrument for measuring patient-centered communication. *Journal of Caring Sciences*,
   4(2), 165–178. <a href="https://doi.org/10.15171/jcs.2015.017">https://doi.org/10.15171/jcs.2015.017</a>
- Zelt, S., Recker, J., Schmiedel, T., & vom Brocke, J. (2018). Development and validation of an instrument to measure and manage organizational process variety. *PLoS ONE*, 13(10), 1-25. <a href="https://doi.org/10.1371/journal.pone.0206198">https://doi.org/10.1371/journal.pone.0206198</a>
- Zuo, S., Huang, N., Cai, P., & Wang, F. (2018). The lure of antagonistic social strategy in unstable socioecological environment: Residential mobility facilitates individuals' antisocial behavior. *Evolution and Human Behavior*, *39*(3), 364–371. http://dx.doi.org/10.1016/j.evolhumbehav .2018.03.00

## Appendix A

## **Expert Panel Email**

Date

## Dear Expert Panelist,

I am contacting you to request your participation as an expert panelist in my doctoral research. According to the National Association of School Psychologists (NASP, 2002, 2014), a threat assessment approach is a predictive and preventative way to address school violence, with one component related to the establishment of district policies that include an evaluation of a potential offender. I have synthesized research on school violence across four disciplines; counseling, criminology, psychology, and sociology to create a proactive interdisciplinary assessment for school violence. Although existing assessments target specific and individual components of school violence, currently an interdisciplinary (i.e., counseling, psychology, criminology, and sociology) assessment for school violence is not available (Borum et al., 1999; Mayer & Jimerson, 2019; Reddy et al., 2001). Therefore, I plan to validate an interdisciplinary assessment for school violence that would assist school personnel in identifying school violence risk factors that could proactively connect students to counseling services and needed support.

As an expert panelist, you would be asked to preform four tasks:

- 1. Indicate which of the four constructs provided fits an item
- 2. Indicate if an item is *clear* (i.e., easy to understand) and *appropriate* (i.e., suitable for the purpose of a risk assessment)
- 3. Provide any items that you believe are missing and which of the four constructs fits the item you provided
- 4. Provide general feedback on the items

If you agree to participate, please indicate the criteria (e.g., by highlighting, bolding, underlining, etc.) that best described you:

- 1. Discipline
  - a. Counseling
  - b. Criminology
  - c. Psychology
  - d. Sociology
- 2. Knowledge of the Four Constructs:
  - a. Internalizing problems
  - b. Extreme beliefs
  - c. Externalizing behaviors
  - d. Lack of attachment
  - e. N/A
- 3. Professional Specialty Area:
  - a. School violence
  - b. Internalizing problems
  - c. Extreme beliefs
  - d. Externalizing behaviors
  - e. Lack of attachment
- 4. Level of Education:
  - a. Master's degree
  - b. Doctoral degree
- 5. Published Article(s) on one or more of the four Constructs
  - a. Yes
  - b. No

Once your responses are received and have agreed to participate, I will reply with an attachment to the expert panel survey document with the items you will be asked to perform the four tasks.

Your time and input are greatly appreciated. If you have any questions, please feel free to contact me via email at Additionally, I have copied my Dissertation Chair, Dr. Roxane Dufrene, to this email if you have any questions for her.

Sincerely,

Lauren Clark, MS, LPC, NCC Doctoral Candidate

# Appendix B

# **Expert Panel Survey (67 Items)**

As an expert panelist, you are asked to preform four tasks:

- 1. Indicate which of the four constructs provided fits an item
- 2. Indicate if an item is *clear* (i.e., easy to understand) and *appropriate* (i.e., suitable for the purpose of a risk assessment)
- 3. Provide any items that you believe are missing and which of the four constructs fits the item you provided
- 4. Provide general feedback on the items

The definitions of the four research constructs are listed below:

Construct	Definition							
Internalizing	is defined as "a core disturbance in intropunitive emotions and moods (e.g., sorrow, guilt, fear,							
Problems	and worry)" (Zahn-Waxler et al., 2000, p 443).							
Extreme Belief	is defined as the "profound convictions opposed to the fundamental values of society, the laws of democracy and the universal human rights, advocating the supremacy of a certain group (racial, religious, political, economic, social, etc.)" Trip et al., 2019, p. 1).							
Externalizing	are defined as "the negative behaviors [that] tend to be expressed outwardly and are likely to							
Behaviors	directly affect other people and society at largebehaviors that seemingly reflect less awareness of or concern for the affective consequences of one's behavior for others" (Miller & Eisenberg, 1988, p. 325).							
Lack of	is defined as "the process of becoming alienated from others [parents, peers, and school]"							
Attachment	(Hirschi, 1969, p. 18).							
Item	For each ite	em, indicate which	Is the item	Is the item				
	of the const	ructs <i>fits</i> each item:	clear?	appropriate?				
	A. Internal	zing Problems	Yes	Yes				
	B. Extreme Beliefs No No							
	C. Externalizing Behaviors							
	D. Lack of Attachment							

- 1. Nervousness
- 2. Low self-esteem
- 3. Anxiety
- 4. Suicidal behavior (e.g., past attempts)
- 5. Paranoid thoughts
- 6. Sadness
- 7. Anger
- 8. Researching about violence
- 9. Parent(s) do not supervise activities
- 10. Direct suicidal ideation (e.g., plan, intent, means)
- 11. Self-harm (e.g., cutting self)
- 12. Self-critical comments
- 13. Parent(s) not responding to communication sent home from school
- 14. Specific details of intended violence
- 15. Victim of bullying
- 16. Identifies with past offenders (e.g., Columbine shooters)

Item	For each item, indicate which	Is the item	Is the item
	of the constructs fits each item:	clear?	appropriate?
	A. Internalizing Problems	Yes	Yes
	B. Extreme Beliefs	No	No
	C. Externalizing Behaviors		
	D. Lack of Attachment		

- 17. Suspicious of others
- 18. Parent(s) not receptive to communication sent home from school
- 19. Threat(s) towards self (e.g., suicide ideation or suicide attempt)
- 20. Threat(s) towards others (e.g., school personnel, peers)
- 21. Threat(s) towards school (e.g., school shooting)
- 22. Indirect threat(s) in writing (e.g., "If I had the chance I would")
- 23. Psychosomatic symptoms (e.g., headaches, stomachaches)
- 24. Indirect threat(s) in drawings (e.g., drawing of snakes, alligator)
- 25. Beliefs about being wronged
- 26. Parent(s) not involved in their academic activities
- 27. Beliefs about being treated unfairly
- 28. Being fearful
- 29. Difficulty accepting responsibility for own actions
- 30. Difficulty accepting being wrong in situations
- 31. Difficulty accepting failure
- 32. Extreme beliefs (e.g., thinks hurting others or school shootings are justified)
- 33. Indirect suicidal ideation (e.g., hopelessness, self-destructive)
- 34. Obtaining a weapon(s)
- 35. Parent(s) not involved in academic performance
- 36. Spends time alone
- 37. Decreased academic performance
- 38. Lacks remorse
- 39. Withdrawn
- 40. Loses temper easily
- 41. Low self-confidence
- 42. Nervous behaviors (e.g., hand wringing, leg shaking)
- 43. Physical fights with peers
- 44. Impulsive (e.g., difficulty waiting turns, acting without thinking of consequences)
- 45. No guilt for harming others
- 46. Disregard for rules
- 47. Unable to maintain long term relationships
- 48. Unhealthy peer relationships
- 49. Fixated or obsessed with intended target
- 50. Negative peer influences

Item	For each item, indicate <i>which</i> of the constructs <i>fits</i> each item:  A. Internalizing Problems  B. Extreme Beliefs	Is the item clear? Yes	Is the item appropriate? Yes No
	C. Externalizing Behaviors D. Lack of Attachment	110	110

- 51. Uninterested in school activities
- 52. Aggressive towards others
- 53. Difficulty dealing with losses
- 54. Anger outbursts
- 55. Negative attitude towards school
- 56. Behavioral problems in class
- 57. Leakage (e.g., harmful intent in writings, drawings, social media posts, or communication with peers)
- 58. Verbal fights with peers
- 59. Disrespectful towards school personnel
- 60. Uninvolved in school activities
- 61. Stealing
- 62. Dislike school personnel
- 63. Small-scale violent acts (e.g., assault, bringing a gun to school)
- 64. Disrespectful towards their parents
- 65. Practicing plans to commit intended violence
- 66. Conflicts with parents
- 67. Substance use

Please provide any items you believe are missing and which of the four constructs the item should be listed:

Please provide any general feedback regarding the items:

# Appendix C

# **Educational Leadership Faculty Email and Focus Group Informed Consent**

From: Lauren Clark

Sent: Sunday, May 16, 2021 4:05 PM

To:

Subject: Request to Distribute Focus Group Participation Email

Hi Dr.

I hope you're doing well! A few semesters ago I was in your research seminar course. Since then, my dissertation focus has remained on instrument development, but has evolved into creating an interdisciplinary school violence prevention assessment for school personnel.

As a beginning phase of my research, I am recruiting principals and teachers for a focus group to assess one simple task of reviewing the instrument items in Qualtrics to determine if each item is clear (i.e., easy to understand) by indicating yes or no.

I'm hoping that you would distribute the request email to current graduate students in your Educational Administration courses, preferably courses with students who are current school principals and teachers. The email below includes an informed consent and a link to Qualtrics.

I do realize it is a busy time of the semester, so I really appreciate your time. If you have any questions, please let me know.

Lauren Clark, MS, LPC, NCC Doctoral Candidate Counselor Education University of New Orleans

**Focus Group Informed Consent** 

Dear Doctoral Student,

My name is Lauren Clark, a doctoral candidate under the direction of my dissertation chair, Dr. Roxane L. Dufrene in the Counselor Education Program at the University of New Orleans. To fulfill my doctoral dissertation requirements, I am developing a preventative assessment to assess students who have been impacted by the factors provided in my research. I am contacting you to request your participation as a focus group participant for my doctoral research. Your time and input are greatly appreciated.

If you are a sixth, seventh, or eighth grade principal or teacher; you are eligible to participate.

As a focus group participant, you will be asked to complete one task:

1. Indicate if each item that is to be included on a school violence prevention assessment for school personnel (e.g., school counselors, principals, and teachers) is clear (i.e., easy to understand) with a yes or no answer.

The anonymous research has been approved by the University of New Orleans IRB. Your participation is voluntary, anonymous, and greatly appreciated. You are able to choose not to participate or withdraw at any time with no penalty. Data collected may be published, but no confidential information about you will be collected or disclosed. No student information will be requested. Completion of the research will be considered your consent to participate. Your IP address will not be collected. However, as in most internet communication, a record of exchange may occur

in a cache somewhere on the computer system or internet service provider's log file. As a precaution, it is suggested that you delete your temporary internet files.
If you agree to participate, please click here: <a href="http://neworleans.co1.qualtrics.com/jfe/form/SV">http://neworleans.co1.qualtrics.com/jfe/form/SV</a> enurB88D3cPBN9X
If you have any questions, please contact me via email at rights as a participant or if you feel that you have been placed at risk, you can contact me at or Dr. Ann O'Hanlon at the University of New Orleans at .
Lauren Clark, MS, LPC, NCC Doctoral Candidate Counselor Education

University of New Orleans

# Appendix D

# **Focus Group Survey (67 Items)**

Item	Is this item clear?
	Yes or No
1. Nervousness	
2. Low self-esteem	
3. Anxiety	
4. Suicidal behavior (e.g., past attempts)	
5. Paranoid thoughts	
6 Codesas	

- 6. Sadness
- 7. Anger
- 8. Researching about violence
- 9. Parent(s) do not supervise activities
- 10. Direct suicidal ideation (e.g., plan, intent, means)
- 11. Self-harm (e.g., cutting self)
- 12. Self-critical comments
- 13. Parent(s) not responding to communication sent home from school
- 14. Specific details of intended violence
- 15. Victim of bullying
- 16. Identifies with past offenders (e.g., Columbine shooters)
- 17. Suspicious of others
- 18. Parent(s) not receptive to communication sent home from school
- 19. Threat(s) towards self (e.g., suicide ideation or suicide attempt)
- 20. Threat(s) towards others (e.g., school personnel, peers)
- 21. Threat(s) towards school (e.g., school shooting)
- 22. Indirect threat(s) in writing (e.g., "If I had the chance I would")
- 23. Psychosomatic symptoms (e.g., headaches, stomachaches)
- 24. Indirect threat(s) in drawings (e.g., drawing of snakes, alligator)
- 25. Beliefs about being wronged
- 26. Parent(s) not involved in their academic activities
- 27. Beliefs about being treated unfairly
- 28. Being fearful
- 29. Difficulty accepting responsibility for own actions
- 30. Difficulty accepting being wrong in situations
- 31. Difficulty accepting failure
- 32. Extreme beliefs (e.g., thinks hurting others or school shootings are justified)
- 33. Indirect suicidal ideation (e.g., hopelessness, self-destructive)
- 34. Obtaining a weapon(s)
- 35. Parent(s) not involved in academic performance
- 36. Spends time alone
- 37. Decreased academic performance
- 38. Lacks remorse
- 39. Withdrawn
- 40. Loses temper easily
- 41. Low self-confidence
- 42. Nervous behaviors (e.g., hand wringing, leg shaking)
- 43. Physical fights with peers

Item	Is this item clear?
	Yes or No

- 44. Impulsive (e.g., difficulty waiting turns, acting without thinking of consequences)
- 45. No guilt for harming others
- 46. Disregard for rules
- 47. Unable to maintain long term relationships
- 48. Unhealthy peer relationships
- 49. Fixated or obsessed with intended target
- 50. Negative peer influences
- 51. Uninterested in school activities
- 52. Aggressive towards others
- 53. Difficulty dealing with losses
- 54. Anger outbursts
- 55. Negative attitude towards school
- 56. Behavioral problems in class
- 57. Leakage (e.g., harmful intent in writings, drawings, social media posts, or communication with peers)
- 58. Verbal fights with peers
- 59. Disrespectful towards school personnel
- 60. Uninvolved in school activities
- 61. Stealing
- 62. Dislike towards school personnel
- 63. Small-scale violent acts (e.g., assault, bringing a gun to school)
- 64. Disrespectful towards their parents
- 65. Practicing plans to commit intended violence
- 66. Conflicts with parents
- 67. Substance use

# Appendix E

# **Peer Reviewer Email and Informed Consent**

Lauren B Clark < > > Mon, Aug 9, 2021 at 9:43 AM Reply-To: Counseling Doctoral Students < > To:
please do not reply directly to the listserv
Dear Doctoral Student,
My name is Lauren Clark, a doctoral candidate under the direction of my dissertation chair, Dr. Roxane L. Dufrene in the Counselor Education Program at the University of New Orleans. To fulfill my doctoral dissertation requirements, I am developing a preventative assessment to assess students who have been impacted by the factors included in the Interdisciplinary School Violence Prevention Assessment (ISVPA). I am contacting you to request your participation as a peer reviewer for my doctoral research. Your time and input are greatly appreciated.
If you are a doctoral supervisor of a school counselor or a school counselor yourself; you are eligible to participate.
As a reviewer, you will be asked to complete two tasks:
1. Complete the Interdisciplinary School Violence Prevention Assessment (ISVPA) on one student who you remember as being in the sixth, seventh, or eighth grade who has been impacted by the factors assessed in the ISVPA.
2. Provide any general feedback you may have about the ISVPA.
The anonymous research has been approved by the University of New Orleans IRB. Your participation is voluntary, anonymous, and greatly appreciated. You are able to choose not to participate or withdraw at any time with no penalty. Data collected may be published, but no confidential information about you will be collected or disclosed. No student information will be requested. Completion of the research will be considered your consent to participate. Your IP address will not be collected. However, as in most internet communication, a record of exchange may occur in a cache somewhere on the computer system or internet service provider's log file. As a precaution, it is suggested that you delete your temporary internet files.
If you agree to participate, please click here: <a href="http://neworleans.co1.qualtrics.com/jfe/form/SV_cBWwgsVxTOsu3tA">http://neworleans.co1.qualtrics.com/jfe/form/SV_cBWwgsVxTOsu3tA</a>
If you have any questions, please contact me via email at rights as a participant or if you feel that you have been placed at risk, you can contact me at or Dr. Ann O'Hanlon at the University of New Orleans at
Thank you in advance for your time.
Sincerely, Lauren Clark, MS, LPC, NCC Doctoral Candidate

# Appendix F

#### **Peer Reviewer Evaluation**

# **Interdisciplinary School Violence Prevention Assessment (ISVPA)**

Lauren Clark, MS, LPC, NCC

#### **DISCLAIMER:**

At this time, the current assessment is undergoing validity testing and is not a valid and reliable school violence assessment. Only broad demographics from the questionnaire are used to protect any identifying information about a student. Results of the assessment should not be used to evaluate a student for school purposes or added to a student's file.

When completing the assessment, do so from an unbiased and objective perspective with a focus on facts and observable behaviors of a student(s). Avoid relying on assumptions, stigmas, or biases regarding the student(s). The current assessment is **not a predictor** of future violence by a student nor is it a method of assessing a student's likelihood of harming others.

**Item Rating Instructions:** Using the Likert ratings with the Frequency and Severity Subscales, please rate each ISVRA item for a student in the *sixth*, *seventh*, *or eighth* grade who you think has been impacted by the factors described for an item. Please **do not** indicate the name of your chosen student.

Frequency Subscale: 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Often

Severity Subscale: 0 = N/A, 1 = Low, 2 = Moderate, 3 = High

	Peer	Review	Evaluatio	n					
	Interdisciplinary School V	iolence l	Prevention	n Assessment	(ISVPA)				
Item		In the last 30 days, how <i>frequent</i> has				In the last 30 days, how severe			
	the student expressed?					were th	e expres	ssions?	
		Never	Rarely	Sometimes	Often	N/A	Low	Moderate	High
		0	1	2	3	0	1	2	3

- 1. Low self-esteem
- 2. Anxiety
- 3. Suicidal behavior (e.g., past attempts)
- 4. Paranoid thoughts
- 5. Sadness
- 6. Anger
- 7. Parent(s) do not supervise activities
- 8. Direct suicidal ideation (e.g., plan, intent, means)
- 9. Identifies with past offenders (e.g., Columbine shooters)
- 10. Suspicious of others
- 11. Threat(s) towards others (e.g., school personnel, peers)
- 12. Threat(s) towards school (e.g., school shooting)
- 13. Indirect threat(s) in writing (e.g., "If I had the chance I would")
- 14. Psychosomatic symptoms (e.g., headaches, stomachaches)
- 15. Being fearful
- 16. Extreme beliefs (e.g., thinks hurting others or school shootings are justified)
- 17. Indirect suicidal ideation (e.g., hopelessness, self-destructive)
- 18. Obtaining a weapon(s)
- 19. Decreased academic performance

Item	In the 1	In the last 30 days, how frequent has				In the last 30 days, how severe			
	the students	the student demonstrated?				were the demonstrations?			
	Never	Rarely	Sometimes	Often	N/A	Low	Moderate	High	
	0	1	2	3	0	1	2	3	

- 20. Withdrawn
- 21. Loses temper easily
- 22. Low self-confidence
- 23. Nervous behaviors (e.g., hand wringing, leg shaking)
- 24. Physical fights with peers

#### Page 1 Likert Rating Totals =

Item		In the last 30 days, how <i>frequent</i> has the student demonstrated?			In the last 30 days, how <i>severe</i> were t demonstrations?			
	Never	Rarely	Sometimes	Often	N/A	Low	Moderate	High
	0	1	2	3	0	1	2	3
25. Impulsive (e.g., difficulty waiting turns, acting without thinking of								
consequences)								
26. Unable to maintain long term relationships								
27. Aggressive towards others								
28. Difficulty dealing with losses								
29. Anger outbursts								
30. Behavioral problems in class								
31. Leakage (e.g., harmful intent in writings, drawings, social media								
posts, or communication with peers)								
32. Verbal fights with peers								
33. Disrespectful towards school personnel								
34. Uninvolved in school activities								
35. Stealing								
36. Dislikes school personnel								
37. Small-scale violent acts (e.g., assault, bringing a gun to school)								
38. Practicing plans to commit intended violence								
(current page) Page 2 Likert Rating Totals =								
(from previous page) Page 1 Likert Totals =								
Total Likert Ratings (pages 1 and 2) =								
		Frequ	ency Subscale	Total =		Sever	ity Subscale	Total =

Provide any general feedback you may have about the ISVPA.

# Appendix G

# School Personnel Demographic Questionnaire

Schoo	l Personn	el Demographics
1.	Age:	 
2.		
	a.	Male
	b.	Female
	c.	Non-Binary
	d.	Transgender
	e.	Other:
3.	Ethnicity	/:
	a.	White
	b.	Black/African American
	c.	American Indian/Alaskan Native
	d.	Latino/Hispanic
	e.	Native Hawaiian/Pacific Islander
	f.	Other
4.	School F	Personnel Professional Role:
	a.	Teacher
	b.	Principal
	c.	School Counselor
5.	Grade Lo	evel
		Sixth Grade
	b.	Seventh Grade
	c.	Eighth Grade
		More than One Middle School Grade
Chose	n Anonyi	mous Student Demographics
	. Age: _	
2	. Gende	
	a.	Male
	b.	Female
	c.	Non-Binary
	d.	Transgender
	e.	
3	. Ethnic	rity:
	a.	
	b.	Black/African American
	c.	American Indian/Alaskan Native
	d.	Latino/Hispanic
	e.	^
	f.	Other
4	. Grade	Level:
	a.	Sixth Grade
	b.	Seventh Grade
	c.	Eighth Grade

### Appendix H

#### School Personnel Association Email and Informed Consent

Hello,

I hope you are doing well. I am a current doctoral candidate in the Counselor Education and Supervision Program at the University of New Orleans. I am emailing to request that the below participant invitation in my doctoral research be distributed to your member listsery.

If you have any questions, please feel free to contact me via email.

Thank you in advance for your time,

Lauren Clark, MS, LPC, NCC Doctoral Candidate

#### **School Personnel Informed Consent**

Hello School Personnel,

My name is Lauren Clark, a doctoral candidate under the direction of my dissertation chair, Dr. Roxane L. Dufrene in the Counselor Education Program at the University of New Orleans. To fulfill my doctoral dissertation requirements, I am developing a preventative assessment for school violence. I am asking you to complete the Interdisciplinary School Violence Prevention Assessment (ISVPA) on one student who you remember as being in the *sixth*, *seventh*, *or eighth* grade who has been impacted by the factors included on the ISVPA and complete a demographic questionnaire.

If you are a sixth, seventh, or eighth grade teacher or principal; you are eligible to participate.

The anonymous research will take 15-20 minutes to complete and has been approved by the University of New Orleans IRB. Your participation is voluntary, anonymous, and greatly appreciated. You are able to choose not to participate or withdraw at any time with no penalty. Data collected may be published, but a participant's confidential information (e.g., your name) will not be collected. Demographics included on the questionnaire about yourself (e.g., age) and your chosen student (e.g., age) will only be reported in aggregate form. Completion of the research will be considered your consent to participate. Your IP address will not be collected. However, as in most internet communication, a record of exchange may occur in a cache somewhere on the computer system or internet service provider's log file. As a precaution, it is suggested that you delete your temporary internet files.

If you agree to participate, please click here: http://neworleans.co1.qualtrics.com/jfe/form/SV\_bvzLmB0gZ89lTxk

If you have any questions, please contact me via email at rights as a participant or if you feel that you have been placed at risk, you can contact me at Dr. Ann O'Hanlon at the University of New Orleans at	our or
Thank you in advance for your time,	
Lauren Clark, MS, LPC, NCC	

Hello School Counselors.

My name is Lauren Clark, a doctoral candidate under the direction of my dissertation chair, Dr. Roxane L. Dufrene in the Counselor Education Program at the University of New Orleans. To fulfill my doctoral dissertation requirements, I am developing a preventative assessment for school violence. I am asking you to complete the Interdisciplinary School Violence Prevention Assessment (ISVPA) on one student who you remember as being in the *sixth*, *seventh*, *or eighth* grade who has been impacted by the factors included on the ISVPA and complete a demographic questionnaire.

If you are a sixth, seventh, or eighth grade school counselor; you are eligible to participate.

The anonymous research will take 15-20 minutes to complete and has been approved by the University of New Orleans IRB. Your participation is voluntary, anonymous, and greatly appreciated. You are able to choose not to participate or withdraw at anytime with no penalty. Data collected may be published, but a participant's confidential information (e.g., your name) will not be disclosed. Completion of the research will be considered your consent to participate. Your IP address will not be collected. However, as in most internet communication, a record of exchange may occur in a cache somewhere on the computer system or internet service provider's log file. As a precaution, it is suggested that you delete your temporary internet files.

If you agree to participate, please click here: <a href="http://neworleans.co1.qualtrics.com/jfe/form/SV\_bvzLmB0gZ89ITxk">http://neworleans.co1.qualtrics.com/jfe/form/SV\_bvzLmB0gZ89ITxk</a>

If you have any questions, please contact me via email at rights as a participant or if you feel that you have been placed at risk, you can contact me at or Dr. Ann O'Hanlon at the University of New Orleans at .

Thank you in advance for your time,

Lauren Clark, MS, LPC, NCC

# Appendix I

#### **School Personnel**

# **Interdisciplinary School Violence Prevention Assessment (ISVPA)**

Lauren Clark, MS, LPC, NCC

#### **DISCLAIMER:**

At this time, the current assessment is undergoing validity testing and is not a valid and reliable school violence assessment. Only broad demographics from the questionnaire are used to protect any identifying information about a student. Results of the assessment should not be used to evaluate a student for school purposes or added to a student's file.

When completing the assessment, do so from an unbiased and objective perspective with a focus on facts and observable behaviors of a student(s). Avoid relying on assumptions, stigmas, or biases regarding the student(s). The current assessment is **not a predictor** of future violence by a student nor is it a method of assessing a student's likelihood of harming others.

**Item Rating Instructions:** Using the Likert ratings with the Frequency and Severity Subscales, please rate each ISVRA item for a student in the *sixth*, *seventh*, *or eighth* grade who you think has been impacted by the factors described for an item. Please **do not** indicate the name of your chosen student.

Frequency Subscale: 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Often

Severity Subscale: 0 = N/A, 1 = Low, 2 = Moderate, 3 = High

Interdisciplinary School Violence Prevention Assessment (ISVPA)									
Item		In the last 30 days, how <i>frequent</i> has In the last 30 days, how <i>severe</i>							
		the student expressed?				were the expressions?			
		Never	Rarely	Sometimes	Often	N/A	Low	Moderate	High
		0	1	2	3	0	1	2	3

- 1. Low self-esteem
- 2. Anxiety
- 3. Suicidal behavior (e.g., past attempts)
- 4. Paranoid thoughts
- 5. Sadness
- 6. Anger
- 7. Parent(s) do not supervise activities
- 8. Direct suicidal ideation (e.g., plan, intent, means)
- 9. Identifies with past offenders (e.g., Columbine shooters)
- 10. Suspicious of others
- 11. Threat(s) towards others (e.g., school personnel, peers)
- 12. Threat(s) towards school (e.g., school shooting)
- 13. Indirect threat(s) in writing (e.g., "If I had the chance I would")
- 14. Psychosomatic symptoms (e.g., headaches, stomachaches)
- 15. Being fearful
- 16. Extreme beliefs (e.g., thinks hurting others or school shootings are justified)
- 17. Indirect suicidal ideation (e.g., hopelessness, self-destructive)
- 18. Obtaining a weapon(s)
- 19. Decreased academic performance

19. Beereusea academie performanee								
Item	In the last 30 day	s, how frequent has	In the last 30 d	In the last 30 days, how severe				
	the student demo	onstrated?	were the demo	were the demonstrations?				
	Never Rarely	Sometimes Often	N/A Low	Moderate High	1			
	0 1	2 3	0 1	2 3				

- 20. Withdrawn
- 21. Loses temper easily
- 22. Low self-confidence
- 23. Nervous behaviors (e.g., hand wringing, leg shaking)
- 24. Physical fights with peers

### Page 1 Likert Rating Totals =

Item	In the last 30 days, how <i>frequent</i> has the student demonstrated?				In the last 30 days, how <i>severe</i> were the demonstrations?			
	Never 0	Rarely 1	Sometimes 2	Often 3	N/A 0	Low 1	Moderate 2	High 3
25. Impulsive (e.g., difficulty waiting turns, acting without thinking of								
consequences)								
26. Unable to maintain long term relationships								
27. Aggressive towards others								
28. Difficulty dealing with losses								
29. Anger outbursts								
30. Behavioral problems in class								
31. Leakage (e.g., harmful intent in writings, drawings, social media								
posts, or communication with peers)								
32. Verbal fights with peers								
33. Disrespectful towards school personnel (e.g., offensive language								
or ignoring direct request)								
34. Uninvolved in school activities								
35. Stealing								
36. Dislikes school personnel								
37. Small-scale violent acts (e.g., assault, bringing a gun to school)								
38. Practicing plans to commit intended violence								
(current page) Page 2 Likert Rating Totals =								
(from previous page) Page 1 Likert Totals =								
Total Likert Ratings (pages 1 and 2) =								
		Frequ	ency Subscale	Total =		Sever	ity Subscale	Total =

Describe any additional information you would like to provide on the student.

# Appendix J

# School Personnel Social Media Posting Made on Behalf of Present Researcher

Geaux Teach English Alumni (LSU teacher education Group)

"Hi, Fellow Geaux Teach Alumni. I'm co-chairing a dissertation for one of my Counselor Education doctoral students, and she's trying to reach middle school teachers, administrators, and school counselors. See below for more info about her study and how you can participate:"

School Counselor Educator's Discussion Group

[school personnel informed consent text followed]

"Hi everyone. I'm posting on behalf of a doc student who's having difficulty getting participants for her dissertation. She's trying to reach current school counselors, teachers, and school administrators at the middle school level. Any assistance in disseminating is greatly appreciated!"

[school personnel informed consent text followed]

\_\_\_\_\_

NJ School and SAC Counselors Online Collaborative

"Attention Middle School Counselors, this person is looking for assistance for her dissertation." [school personnel informed consent text followed]

### Appendix K

### **School Personnel Social Media Posting**

Research Request for Middle School Personnel -Validation of a School Violence Prevention Assessment

I am a current doctoral candidate in the Counselor Education and Supervision Program at the University of New Orleans. I'm hoping that you would be willing to participate in my dissertation research [IRB # 01May21].

My hopes are to address the current school violence crisis & to help connect students at risk to effective counseling services through the development of a school violence prevention assessment.

I've been having a difficult time recruiting participants, which could be attributed to Hurricane Ida and the ongoing COVID-19 pandemic. I would be incredibly grateful and appreciative for any help that you can provide!

Participation only takes 15-20 minutes! Here's the link to the informed consent & instrument:

https://neworleans.co1.qualtrics.com/jfe/form/SV\_6M7s5UxKXci53V4?fbclid=IwAR3fz6oh5Fs5ZcRSag\_Ix0ui73 Ml\_GhkolrOHmJ-OEg4xVVgfodx1kBr87s

Hello School Personnel,

My name is Lauren Clark, a doctoral candidate under the direction of my dissertation chair, Dr. Roxane L. Dufrene in the Counselor Education Program at the University of New Orleans. To fulfill my doctoral dissertation requirements, I am developing a preventative assessment for school violence. I am asking you to complete the Interdisciplinary School Violence Prevention Assessment (ISVPA) on one student who you remember as being in the *sixth*, *seventh*, *or eighth grade* who has been impacted by the factors included on the ISVPA and complete a demographic questionnaire.

If you are a sixth, seventh, or eighth grade school counselor, teacher, or principal; you are eligible to participate.

The anonymous research will take 15-20 minutes to complete and has been approved by the University of New Orleans IRB. Your participation is voluntary, anonymous, and greatly appreciated. You are able to choose not to participate or withdraw at anytime with no penalty. Data collected may be published, but a participant's confidential information (e.g., your name) will not be disclosed. Completion of the research will be considered your consent to participate. Your IP address will not be collected. However, as in most internet communication, a record of exchange may occur in a cache somewhere on the computer system or internet service provider's log file. As a precaution, it is suggested that you delete your temporary internet files. If you agree to participate, please continue.

If you have any questions, please contact me via email at	. If you have any questions about you
rights as a participant or if you feel that you have been pla	aced at risk, you can contact me at
Dr. Ann O'Hanlon at the University of New Orleans at	

Thank you in advance for your time, Lauren Clark, MS, LPC, NCC

# Appendix L

# **Graduate Level Education Programs Email**

### Good morning,

I hope you're doing well! I am a current doctoral candidate in the Counselor Education and Supervision Program at the University of New Orleans. I'm hoping that you would be willing to distribute the below participant invitation in my doctoral research to your program's graduate level education students, predominately existing middle level teachers and principals.

My hopes are to address the current school violence crisis through my research and help connect students at risk to effective counseling services.

I've been having a difficult time recruiting participants, which could be attributed to Hurricane Ida and the ongoing COVID-19 pandemic. I would be incredibly grateful and appreciative for any help that you can provide! Participation only takes 15-20 minutes!

If you have any questions, please feel free to contact me via email.

Thank you in advance for your time,

Lauren Clark, MS, LPC, NCC Doctoral Candidate

# **Graduate Level Counseling Programs Email**

### Good morning,

I hope you're doing well! I am a current doctoral candidate in the Counselor Education and Supervision Program at the University of New Orleans. I'm hoping that you would be willing to distribute the below participant invitation in my doctoral research to your program's graduate level counseling students and alumni, specifically existing middle school counselors.

My hopes are to address the current school violence crisis through my research and help connect students at risk to effective counseling services.

I've been having a difficult time recruiting participants, which could be attributed to Hurricane Ida and the ongoing COVID-19 pandemic. I would be incredibly grateful and appreciative for any help that you can provide! Participation only takes 15-20 minutes!

If you have any questions, please feel free to contact me via email.

Thank you in advance for your time,

Lauren Clark, MS, LPC, NCC Doctoral Candidate

#### Vita

Lauren B. Clark was born in New Jersey and graduated with a Bachelor of Arts degree in Psychology and an Applied Psychology Minor in 2013 from Pace University in New York, N.Y. She continued her education and graduated with a Master of Science degree in Mental Health Counseling in 2016 from Monmouth University in West Long Branch, N.J. Finally, she moved to New Orleans, L.A. to pursue a doctoral degree from the University of New Orleans and pursued licensure in the state of Louisiana. Lauren is a Licensed Professional Counselor (LPC) and a National Certified Counselor (NCC), who has experience working with children, adolescent, and adult clients who present with a wide range of diagnoses. Her career goals include pursuing a tenure-track position in academia and to continue her research interests in school violence.