

IDENTIFYING A SCHOOL SHOOTER: A STUDY OF SCHOOL COUNSELOR
TRAINING AND EXPERIENCE

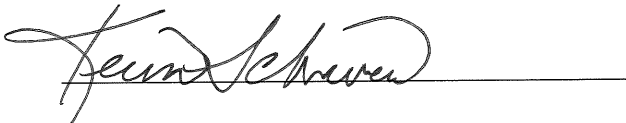
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2018

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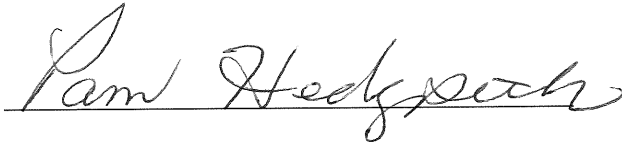
IDENTIFYING A SCHOOL SHOOTER: A STUDY OF SCHOOL COUNSELOR
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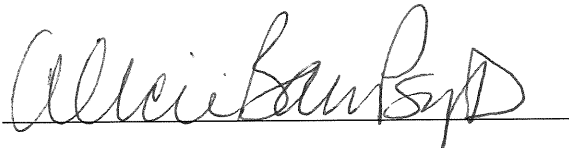
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TRAINING AND EXPERIENCE

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By

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ABSTRACT

School rampage shootings have created a media frenzy throughout the nation, which has sent a message our schools are unsafe for students to walk the halls. School staff members, parents, and the community want to know something is being done to keep students safe. Many elaborate safety plans have been created to prevent dangerous individuals from coming into the building or response plans for the aftermath of such tragedies. This study wanted to examine if the counselors, who provide a mental health expertise in education, have the proper training to identify students who are planning such heinous attacks against their peers. For the survey instrument, this study utilized former FBI profiler Mary O'Toole's threat assessment to create a school shooter vignette including various warning signs from a student's family history, behavioral traits, school environment, and social dynamics. School counselors, who worked with students 6-12 grade, were asked to read the vignette and then answer questions from the four threat assessment areas in an open-ended style survey or closed-ended style survey. The study's primary researcher questions focused on the year of the certification for counselors and previous mental health experience of the counselor. In 2009, the Council Accreditation of Counseling and Related Educational Programs included a trauma response standard for counseling certification. Due to the change in standards, the survey incorporated 2009 as the year of analysis. Furthermore, the study aimed to determine if previous mental health experience aided counselors in identifying warning signs. This study did not show a difference existed for previous mental health experience and year of certification.

CHAPTER ONE

INTRODUCTION

School violence has become a part of the educational experience for students in the United States. According to the Centers for Disease Control and Prevention (CDC, 2013), school violence is the “intentional use of physical force or power, against another person, group, or community, with the behavior likely to cause physical or psychological harm” (p. 1). D’Andrea (2004) identified six categories of school violence: physical, sexual and gender, media, cultural, political, and violence of silence. School violence in ages 10 to 24 includes fighting, weapon use, bullying, electronic aggression, and gang violence (D’Andrea, 2004). Through the Youth Risk Behavior Survey, the CDC has gathered information about school violence. Violent behavior on school property has decreased in occurrence from 1993–2013, with the 2011–2013 school years seeing no change in the number of incidents (CDC, 2013). Prior to 1992, school shootings were often nonrandom acts committed in urban inner-city settings that occurred over drugs or a girl (Kimmel & Mahler, 2003). Perhaps the most media-saturated form of school violence is school rampage shootings that have occurred since the mid 1990s. Although school rampage shootings, such as Sandy Hook or Columbine, are rare, they have attracted a large amount of media attention, leaving the nation wondering how to keep students safe (Langman, 2009a).

School rampage shootings often occur in suburban or rural communities with low crime rates (Agger & Luke, 2008; National Science Foundation [NSF], 2013). Current or former students of the district, in a symbolic act, commit school rampage shootings oftentimes with no particular victim (Douglas & Olshaker, 1999; Newman, Fox, Harding,

Mehta, & Roth, 2004; Rocque, 2012). School rampage shootings differ from other acts of school violence due to the randomization of the victims. Acts of school violence in urban areas are usually the result of a dispute between two people or groups of people, while victims of school rampage shootings may not be previously connected to the perpetrator (Casella, 2001; Kimmel & Mahler, 2003; NSF, 2013). Furthermore, school rampage shooters have put time into creating a plan of attack with specific details, as opposed to the student in a low economy, urban community that commits violent acts based on impulse (Twemlow, Fonagy, Sacco, & Vernberg, 2002).

While violence crime rates are higher in urban, lower class areas, the obscurity of school rampage shootings that occur in rural, middle class communities creates a media frenzy sending the message these types of shootings can happen anywhere at any time (Agger & Luke, 2008; Goode & Ben-Yehuda, 2009). Columbine, Virginia Tech, and Sandy Hook have struck fear in schools across the United States. During the late 1990s school shootings increased 258% from 53 shootings during 1960–1990 to 190 shootings during 1990–2014 (Duplechain & Morris, 2014). Major school shootings such as Jonesboro in 1998, Columbine in 1999, Virginia Tech in 2007, and Sandy Hook Elementary in 2012 are events in the nation’s history that have caused educators to reevaluate the processes used to identify shooters and services provided to at-risk youth in the public education setting (Duplechain & Morris, 2014; Harter, Low, & Whitesell, 2003). As a result, educators must address the issue of keeping students safe while examining what steps can be taken to prevent such acts of violence. It is essential that school personnel examine the practices in place that are used to properly identify students

who exhibit warning signs and the training provided to those individuals to help with identification.

Theoretical Framework

One theoretical framework of this study is rooted in the work of Albert Bandura's social learning theory, social cognitive theory, and self-efficacy theory. Albert Bandura's work in 1963 was centered on the belief that humans act in accordance to what they observe in their environment and their actions are reinforced by the feedback they receive from the environment (Bandura, 2002; Pajares, 2002). In 1986, Albert Bandura's thinking about human functioning of people being solely influenced by their surroundings expanded to include a self-efficacy belief component (Pajares, 2002). According to Bandura (1986), a person's self-efficacy belief is "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). A person's self-efficacy belief is the thought pattern one has in how successful or unsuccessful he or she will be in carrying out a task; furthermore, a person has to be motivated enough to carry out the task. In other words, the reward of completing the task has to outweigh the cost of not completing the task (Pajares, 2002).

The theoretical framework is also founded in person-environment fit theory. The person-environment fit theory is defined as the interaction between one's personality and the surroundings that negatively or positively affect the person's behavior negatively or positively (Eccles & Midgley, 1989). Inappropriate adolescent behaviors occur when a student experiences inconsistencies between themselves and others in their environment; furthermore, appropriate adolescent behaviors will occur when one experiences positive

affirmation from peers in social settings (Eccles & Midgley, 1989; Hunt, 1975; Murray, 1938). Simply stated, a person adjusts better in situations when a common set of norms and personal characteristics are shared by a group while the inverse relationship exists as well (Eccles & Roeser, 2011). Person-environment fit theory plays a large role in a person's transition into adolescence.

Social learning theory. Bandura (1977) stated social learning is a “continuous reciprocal interaction between behavior and its controlling conditions” (p. 2). In social learning theory, a person acts in ways that are influenced by internal thoughts and external environmental factors (Bandura, 1977). Observational learning begins with understanding what an individual chooses to focus on when observing others, which is known as the attention process. Next, the retention phase, describes the memory ability of a person. The retention process flows into the motoric reproduction phase which is the understanding of foundational skills to complete complex tasks. Finally, the amount of reinforcement and motivation a person receives when displaying the behavior is known as the reinforcement and motivational process (Bandura, 1977). Children learn behaviors and social mannerisms through modeling (Bandura, 1977; Dogra, 2008). A reciprocal relationship exists between the environment and a person's behavior: a person's behavior influences the environment and the environment influences the behavior (Bandura, 1977; Kendall, Lerner, & Craighead, 1984). A person's behavior is significantly influenced by how others respond to them (Bandura, 1977).

Social cognitive theory. The social cognitive theory presented by Bandura suggests human functioning through three cohesive lenses: personal, behavioral, and environmental influences (Bandura, 2002; Pajares, 2002). At the time of Bandura's work,

theorists believed humans were just products of their environment; however, Bandura brought forth the role individuals play in shaping the decisions and path they chose. As a result, Bandura changed the social learning theory to social cognitive theory to encompass the self-reflection piece that social learning theory was missing.

Bandura's idea of self-efficacy beliefs is an individual's acceptance of one's capabilities of completing a task (Pajares, 2002). High self-efficacy leads to more successful thought patterns, while a low self-efficacy leads to doubt and fear of completing a task. Self-efficacy influences the emotional well-being of a person as well as the motive behind the decisions a person makes; self-efficacy beliefs are what shape a person's desire to choose various paths in life (Bandura, 2002). According to McGee and DeBernardo (2003), vengeance was the underlying motive behind 10 school shootings committed during 1993-1999. In this study, school shooter profiles were examined to include the emotional and mental state of those individuals at the time of the shooting. Being bullied or disciplined at school, the shooters attached a negative meaning to these experiences and, over time, shooters believed they lacked the ability to change their path. This led to a disturbed emotional state influencing their self-efficacy belief they could commit such a crime.

Self-efficacy beliefs are shaped by past experiences, observational experiences of others, current emotional state, and the feedback received from others (Pajares, 2002; Salyers, 2008). As one moves through life, that person is continually attaching meanings to perceived successes and failures of previous performances and the praise and criticism given by others. As a result, the attached meaning of experiences coupled with cultural influences drives the thoughts and decisions a person chooses to carry out (Bandura,

2002; Pajares, 2002). Cultural influences are a component of the beliefs one develops; the morals and values of the culture are the lens through which a person filters the attached meaning to given experiences (Bandura, 2002). A person is continually influenced by the world around him or her, while also continually influencing the world in return.

Person-environment fit theory. Person-environment theory is the extent to which a person's behaviors are influenced by the surroundings and the characteristics of the person (Eccles & Midgley, 1989). One area of focus in person-environment fit theory is the transition into adolescent years. Adolescence can be a time of great enjoyment and growth; however, it can also be a time of great strife and struggle. As one moves into adolescence, that person experiences many major developmental changes cognitively and physiologically due to school transitions and revolving peer groups (Gutman & Eccles, 2007). Adolescents tend to experience a decline in self-worth as they move into teen years; however, this decline stabilizes in later teen years (Gutman & Eccles, 2007).

During teen years, adolescents will begin to establish themselves as individuals through interactions highly influenced by the surroundings with peers, impacting one's emotional and cognitive development (Eccles & Roeser, 2011). Surrounding factors can have a negative or positive impact on one's development. Factors that negatively impact a student have the potential to lower self-esteem and affect mental health, resulting in an increase in problematic behavior. These behaviors affect the educational setting. As a result, the school counselor serves as an essential resource for students. Most adolescents engage in delinquent behavior entering adolescence and it decreases with age (Gutman & Eccles, 2007).

Threat assessment. For the purpose of this study, the researcher utilized the work of Mary O’Toole and the National Center for the Analysis of Violent Crime (NCAVC). O’Toole, along with the NCAVC, analyzed 25 years of data and reviewed 18 school shootings to create a threat assessment presented findings, *The School Shooter: A Threat Assessment Perspective*, at a symposium in Leesburg, Virginia, in July 1999 (O’Toole, 1999). The NCAVC began a study to investigate the school shooter, social dynamics, school environment, and family background in May 1998 (O’Toole, 1999). The 1999 Leesburg Symposium aimed to assist educators, mental health experts, and other persons who work with adolescents to respond to threats or violent acts. The threat assessment guides individuals through identifying the level of threat, warning signs, and appropriate responses.

Problem Statement

In the United States, there was an average of 20 school shootings each year from 2010-2014 (Duplechain & Morris, 2014) perpetuated by students suffering from mental health illness and bullying situations in the academic settings (Davies, 2008; Duplechain & Morris, 2014; Harter et al., 2003). Currently, districts’ efforts to prevent school shootings are spent on increasing security measures against the outside predator; however, school rampage shootings are committed by students within the four walls of the school (Dikel, 2012). There is an increase in school violence committed by students within the school setting, and violent behaviors increase particularly during adolescent years (Bushman et al., 2016). These students exhibit certain warning signs such as a history of mental health illness, being victims of bullying, lack of family attachment, and fascination with violence (Borum, 2000; McGee & DeBernardo, 2003). As a result of

these exhibited warning signs, many school districts view the school guidance counselor as the connection between the school and mental health services (Riley & McDaniel, 2000).

Counselor training and education in the area of identifying school shooters is imperative to keeping students safe as well as providing interventions to those in need. Chandler, Burnham, and Dahir (2008) found counselors are caught up in a whirlwind of duties including administrative, state-mandated testing, and crisis intervention to help students; as a result, counselors feel ill prepared to handle crises that may arise. Middle school counselors are involved in a child's life at a critical time when a student is transitioning from childhood to adolescence (Dahir, Burnham, & Stone, 2009). The middle school counselor takes on the challenging role of linking academics, vocational aspirations, and newly found social dynamics for a student. School counselors provide support to teachers and students in the educational setting. Educators seek the advice of counselors on how to build relationships with students or deal with inappropriate behaviors exhibited in class.

School rampage shootings have drastically affected the safety of educational environments. Students, parents, and educators fear the effects of school shooting happening within their community. The catastrophic results of a school rampage shooting can have implications for years. Martin (2013) stated educators live with two misconceptions of school shooters: the perpetrator is an outsider that can be locked out of the building and the perpetrator is a disturbed youth. The problem is not outside the building, but students suffering inside the building. School districts should not spend resources on creating elaborate security plans, but rather efforts should be spent on

addressing the mental health needs within their four walls (Martin, 2013). School counselors can serve as a valuable resource for identifying these suffering students before they take drastic measures.

Before extreme acts of violence are carried out, counselors need to have training on how to identify students who exhibit warning signs in order to provide supports or interventions to those students. Although recent studies indicate counseling graduates are receiving more training in crisis intervention, Allen et al. (2002) found that 33% of new graduates are still lacking the practical experience necessary to prepare for such situations. Furthermore, they stated the need for counselor training programs to incorporate crisis intervention strategies for dealing with suicide and violent behaviors. With the increase of school rampage shootings, the school counselor needs training to identify the students who exhibit warning signs typical of school rampage shooters. Furthermore, counselors need training and the opportunity to work in conjunction with the school, parents, teachers, and if needed, mental health experts to address the troubling behaviors the student is expressing.

Rationale for the Study

The purpose of this study was an evaluation of a counselor's ability to identify students who exhibit warning signs of school rampage shooters. While studies focused on school shootings have increased, these studies focus on the connection between school shootings and academic performance, response of schools, and particular characteristics of school shooters. Salyers (2008) analyzed the writings of four school shooters to determine the relationship of giftedness and school shooters. Salyers found the shooters were motivated to gain power over a negative situation and 3 of the 4 shooters showed

giftedness in the writings analyzed. In another study, Nielsen (2003) observed the response of four high schools after school shootings occurred to determine the changes implemented in school safety. Nielsen found the schools increased school programs to provide connection for students to the school as far as making friends and getting involved in programs, as well as creating a crisis management plan.

Many researchers have completed historical studies that investigated the behaviors of school rampage shooters. Vossekuil, Fein, Reddy, Borum, and Modzeleski (2002) reviewed 37 incidents of school violence and found feelings of depression and resentment, coupled with a strong interest in violence, in youth who committed school rampage shootings. Verlinden, Hersen, and Thomas (2000) analyzed 37 school rampage shooters and noted the following common characteristics among the shooters: suicidal ideation, history of substance abuse, depression, weapon and violence fantasies, and signs of mental health illness. Meloy, Hempel, Mohandie, Shiva, and Gray (2001) reviewed 37 shooters and found that many experienced bullying from peers, depressed mood, and strong interest in violent media. Finally, Leary, Kowalski, Smith, and Phillips (2003) analyzed 15 school rampage shootings and found that interest in weapons, depression, and peer rejection were warning signs of the perpetrators. J. G. Johnson et al. (2000) observed the connection between personality disorders and adolescent violence; they recommended more research be done in identifying and treating those who have personality disorders and a history of violence to prevent such violent acts as school rampage shootings. According to Adshead, Brodrick, Preston, and Deshpande (2012), psychologists are hesitant to diagnose a young person with personality disorder because of the stigma that comes with the diagnosis and the fact one's personality is not fully

developed until their early 20s. However, little research has been conducted to observe the role of the counselor in identifying the warning signs of potential school shooters (Harris & Jeffrey, 2010). This study was an attempt to fill the void regarding better detection of potential school shooters.

School counselors are used as resources for teachers and administrators, and are sometimes the first line of defense in interventions for students who exhibit a change in behavior or antisocial behaviors (Bauman, 2008; Costin, Page, Pietrzak, Kerr, & Symons, 2002; Harris & Jeffrey, 2010; Schaefer-Schiumpo & Ginsberg, 2003). Researchers agree counselors are in unique positions to address student behaviors (Branthoover, Desmond, & Bruno, 2010; Olson & Allen, 1993). Counselor training needs to focus on preventing extreme acts of school violence such as school rampage shootings by intervening through providing supports to student suffering in the school environment. Schaefer-Schiumpo and Ginsberg (2003) found that counseling graduate students expressed a lack of training in handling extreme youth violence and school counselors felt they had little preparation and skills necessary to prevent such extreme school violence. Harris and Jeffrey (2010) conducted a study of school counselors' perceptions on youth violence and found that although they responded to acts of violence, they had little to do with preventing the violence. However, also they reported the need to prevent school bullying and violence.

The Council for Accreditation of Counseling and Related Educational Programs (CACREP) is the guiding force for counselor curriculum in certification programs (Adkison-Bradley, 2013). The accreditation organization sets expectations for K-12 school counseling graduates to have competencies in the areas of academic, career, and social development (CACREP, 2009). In 2009, a critical component was added to

certification programs. The CACREP organization required counselor certification programs to train future counselors in crisis, disaster, and trauma-causing events (CACREP, 2009). For the current study, the researcher used 2009 as the year of analysis because of the implementation of this particular training and its connection to the trauma of school shootings.

The researcher also examined the path counselors took to becoming a school counselor in terms of teacher certification. Few states require a person to have previous teaching experience before obtaining a counseling position (Peterson, Goodman, Keller, & McCauley, 2004). The researcher compared counselors with teaching experience and those without teaching experience in the study. According to researchers, administrators, teachers, and counselors, they did not feel previous teaching experience is a necessary criterion to being a successful counselor (Olson & Allen, 1993; Peterson et al., 2004; Smith, Crutchfield, & Culbreth, 2001). Peterson et al. (2004) stated that a counselor's expertise in mental health and experiences with various age groups provides the counselor, with or without teaching experience, an advantage in addressing student needs. The researcher wanted to know if previous mental health experience would assist in identifying warning signs.

This study focused on the ability of school counselors to identify warning signs before school rampage shootings occur. O'Toole (1999), in conjunction with the FBI, provided a threat assessment for analyzing school violent threats that arise. The report reviewed 14 school rampage shooting cases and identified 47 warning signs the perpetrators displayed. Salyers' (2008) study underscored the importance lower self-efficacy plays in motivating a person to carry out such crimes; writing samples of

students who became school shooters showed a distressed mental state with negative peer relationships occurring in their lives. Identifying these negative emotions and feelings is critical in addressing the problem before violence occurs. If a school has the ability to identify students and be proactive the devastation that results from traumatic school rampage shootings could be avoided. This would create a learning environment where parents feel that their students are safe and where teachers can focus on educating the students.

Primary Research Questions

The purpose of this study was an evaluation of a counselor's ability to identify students who exhibit warning signs of school rampage shooters. The researcher administered a written vignette of a school rampage shooter presenting various warning signs. Counselors surveyed read a vignette and answered a series of questions based on a threat assessment. The researcher analyzed the responses of Missouri school counselors in the following areas:

1. To what extent can secondary school counselors identify the key traits of a school rampage shooter?
2. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage shooters for counselors that graduated prior to 2009 and those that graduated after 2009?
3. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage

shooters for counselors that have previous mental health experience or training versus those who do not?

Secondary Research Questions

1. To what extent are secondary school counselors trained to identify the behavioral traits typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
2. To what extent are secondary school counselors trained to identify the family history signs that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
3. To what extent are secondary school counselors trained to identify the school environment dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
4. To what extent are secondary school counselors trained to identify the social dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?

Assumptions/Limitations/ Delimitations

An assumption of the study was counselors answered the questionnaire honestly. Another assumption of this study was the counselors who completed the questionnaire met all certification requirements set forth by Missouri Department of Elementary and Secondary Education. A third assumption was the assumption for independence, whereby each participant took the survey only once. Finally, an assumption was the two groups analyzed in the study were equivalent in years of experience represented in each group.

The study was limited geographically to the state of Missouri working as secondary school counselors. Another limitation of this study was the data collected were based on self-reporting of the school counselors on the questionnaire. A third limitation was the two groups that were created by using the graduation year of 2009 as the year of study, creating experienced versus novice counselors. One delimitation of the study was including only public schools in Missouri that employed school counselors.

Design Controls

This study was a quasi-experimental design study. During the study, the researcher delivered a school rampage shooter written vignette based on the warning signs in the review of literature to Missouri school counselors. In the operational definitions, the phrase school rampage shootings has been defined clearly to limit confusion. The researcher addressed the potential research bias that could present itself in this study. The researcher ensured an expert panel vetted the questionnaires and vignette.

Definition of Key Terms

Class Avenger. An adolescent male who commits a nontraditional homicide in a rural school (McGee & DeBernardo, 2003).

Comprehensive School Counseling Programs. Strategic approach to counseling to encompass developmental, preventative services as well as academic and supportive services to students (Brown & Trusty, 2005).

Leakage. Verbal or nonverbal indications made by school shooters before the shooting occurs. This could be in the form of recruiting a person, warning friends to stay away from school, verbalizing plans to someone, or writing about violence (Langman, 2012).

School Rampage Shooting. School shooting committed by a current or former student with no particular victim, usually ends in the death of the shooter, mass shooting in a ceremonial fashion for the shooter to gain fame or revenge for a perceived previous negative experience (Newman et al., 2004; Rocque, 2012).

Threat Assessment. Guides school officials through addressing student threats that are made by determining the degree to which the student has the motivation and plans to carry out the threat (O'Toole, 1999).

Vignette. Short stories about sensitive information created to place the respondent in a real-life situation to elicit responses about expected behavior (Schoenberg & Ravdal, 2000).

Summary

With an increase in school violence, it is imperative for the school district to be proactive rather than reactive to acts of school violence. The purpose of this study was to evaluate a counselor's ability to identify students who exhibit warning signs of school rampage shooters. The study gathered data on the ability of the school counselors to identify warning signs typical of a school rampage shooter when given a vignette of a student and be able to fill the void in the research of counselor training and assisting students in the educational environment. The goal of the study was to provide feedback for counselor training curriculum and counselor professional development offerings to help students in need.

Chapter Two thematically reviews the current literature of adolescent behaviors, warning signs of school rampage shooters, FBI Threat Assessment, and the training of Missouri school counselors. Chapter Three details the methodology utilized in this study

including study participants, sample selection, research design, data analysis, and instrumentation. Chapter Four presents the research results. Chapter Five states the summary and provides recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

This review of literature is organized thematically in four sections: prosocial and antisocial adolescent behaviors, warning signs of school rampage shooters, protocols utilized to assess shooter threats, and training of Missouri school counselors. This chapter discusses behaviors adolescents exhibit that are considered appropriate and inappropriate incorporating person-environment fit theory and social learning theory. Furthermore, it includes warning signs displayed by school rampage shooters with an emphasis on person-environment fit theory and the types of processes used to assess a school shooter threat focusing on social cognitive theory. Finally, the review of literature focuses on the training of Missouri school counselors. The purpose of this study was to evaluate a counselor's ability to identify students who exhibit warning signs of school rampage shooters.

School violence has always been a part of the educational system. The 1900s saw isolated events of extreme violence, with the majority of violence due to riots or protests (Rocque, 2012). After World War II, schools across America experienced an increase in violence (Casella, 2001; Rocque, 2012). In the 1970s, politically charged students in education resulted in an increase of violence leading to schools implementing a school resource officer, and the government taking notice by collecting and disseminating school violence data (Rocque, 2012). Through the 1980s until the early 1990s, public education in America experienced an increase in student violence, particularly the K-12 setting. The 1990s began a period of steady decline of the school violence due to implementation of

the school resource officer and educator awareness (Rocque, 2012). However, the mid-1990s began a period of a different kind of school violence that impacted the nation.

In the late decades of the '90s, the United States experienced a phenomenon called school rampage shootings (Rocque, 2012). Although school rampage shootings are considered rare in comparison to other acts of violence, rampage shootings have taken the nation by storm due to the nontraditional location and seemingly unsuspecting perpetrators (O'Toole, 1999; Rocque, 2012). Until the late 1990s, most fatalities occurring on school campuses were committed by perpetrators looking for a specific victim, living in an under-resourced, urban population (Casella, 2001; Rocque, 2012; Sampson, Morenoff, & Raudenbush, 2005). In the mid-1990s, education across the country was changed forever with multiple homicides committed by students of the school district in a single event; this became known as school rampage shootings (McGee & DeBernardo, 2003; Rocque, 2012). School rampage shootings are typically committed in areas of low crime, with the shooting being more a symbolic action of defiance, or revenge to previous transgressions (Newman et al., 2004; Rocque, 2012). Despite the increase in school rampage shootings, schools are now considered much safer places against school violence due to increased security measures, awareness of school shooters' personal history, and training for staff (Midlarsky & Klain, 2005).

This review of related literature serves the purpose of examining the appropriate and inappropriate adolescent behaviors. Furthermore, warning signs of school rampage shooters are reviewed. The review of literature analyzes the work of O'Toole (1999) and the FBI's Threat Assessment to describe four areas that influence student behavior:

behavioral characteristics, family dynamics, school environment, and social dynamics. Finally, the review of literature covers the training of school counselors.

Behaviors of Adolescents

Before identifying the warning signs or risk factors school rampage shooters have displayed, it is important to identify the appropriate or prosocial behaviors and inappropriate or antisocial behaviors of adolescents. Ages 13–17 is a time of great change; the student is going through biological changes such as puberty, physiological changes, and an increased need for independence (Borum, 2000; Gutman & Eccles, 2007; O’Toole, 1999). According to the social learning theory, people’s identity and behaviors are shaped by their interactions and observations with others whether negative or positive (Bandura, 1977). Aspy et al. (2004) identified prosocial behaviors, youth assets, adolescent students should have to prevent school violence. Youth assets aid an adolescent in handling social interactions with peers and adults, as well as coping with adverse situations that might arise. When a student is better able to adapt to the environment or surroundings, he or she is able create stability in his or her world. According to Bernes and Bardick (2007), the more youth assets one possesses the less likely a student is to exhibit violent behaviors (Bushman et al., 2016).

When attempting to identify warning signs of a school rampage shooter, educators need to be familiar with the student in question. Building relationships with students is important to identifying changes that occur in student behavior. O’Toole (1999) provided behavioral signs educators should attend to when learning about a student’s personality. A student’s personality shows through how he or she responds to disappointment, interactions with others, conflict resolution with others, and attitude toward self

(O'Toole, 1999). A student's personality provides insight to behaviors he or she expresses. In the person-environment fit theory, these behaviors will shape and be shaped by the school environment the in which the student is absorbed (Eccles & Roeser, 2011).

Students with age-appropriate cognitive resources are able to create and maintain relationships showing empathy for others while still valuing solitude. In addition, mentally healthy adolescents are able to learn at an age-appropriate level and show prosocial behaviors such as following instructions (Dogra, 2008). According to Satcher (2003), a vast number of students ages 11 to 14 are in need of mental health services. Self-esteem plays a crucial role in the mental health of a person. Dogra (2008) stated adolescents with high self-esteem typically come from supportive homes with parents who set boundaries and clear expectations in discipline and academics. A student's feelings of self-esteem greatly influence their self-efficacy and ultimately their ability to learn and take on new tasks in life (Bandura, 2002).

Appropriate behaviors of adolescents. Appropriate behaviors are actions and responses in social settings deemed age appropriate by peers (Elksnin & Elksnin, 2009). The social emotional reciprocity behaviors include making appropriate eye contact and taking turns during conversations, as well as compromising with a mild temperament when disagreements arise. Interacting in appropriate ways includes initiating conversation with others and appropriately joining an established game or activity with others. During school, age-appropriate behaviors include ignoring distractions while following instructions and easily transitioning from class to class (Dogra, 2008; Gresham, Van, & Cook, 2006). By adolescence (ages 11 and older), a person should be capable of setting vocational and academic goals and cultivating peer relationships; furthermore, at

this time, adolescents begin developing a sense of self and personal ethics. Adolescents will begin creating friendships based on shared interests and will become confidants sharing information with each other (Dogra, 2008). According to the person-environment fit theory, these friendships reveal how a student interacts with the school environment (Eccles & Roeser, 2011).

Aspy et al. (2004) reiterated the importance of relationships with peers and adults throughout adolescent years. A student should have strong social connections at school, as well as a network of positive adult relationships, to guide the student through tough situations (Simons, Paternite, & Shore, 2001). Eccles and Roeser (2011) stated person-environment fit theory shows students with stronger connections to his or her surroundings will thrive in the environment. Strong adult relationships are critical for adolescents to learn how to navigate through conflict resolution and learn ways to self-soothe (Aspy et al., 2004; Bushman et al., 2016). The family environment is a critical place to establish emotional healthy and well adjusted adolescents; the youth assets from the family environment include both parents in the home, above average family income, and parent knowledge of child's social relationships (Aspy et al., 2004; Bushman et al., 2016; Langman, 2009b). Parents need to know what their children are doing when they are alone and with others (Langman, 2009b).

Inappropriate behaviors of adolescents. In social learning theory, a person experiences difficulty in relationships when constricted ranges of social skills or behaviors have been learned (Bandura, 1977). Impulsive or erratic actions along with extreme moodiness and agitation are inappropriate or competing behaviors as adolescents mature. Students who cannot control their temper tend to be involved in more fights and

bully others; furthermore, inappropriate behaviors include distracting behaviors and lacking respect for authority (Climie & Altomare, 2013; Dogra, 2008; Gresham et al., 2006). Impulsivity, distracted, and noncompliance are inappropriate externalizing behaviors while internalizing behaviors are social isolation, anxiety, or depression (Gresham et al., 2006). Furthermore, there is a strong connection between impulse behaviors and violent behaviors (Borum, 2000). Furthermore, Borum (2000) suggested inappropriate behaviors can be an indication of one's capacity to commit violent acts.

Warning Signs of School Rampage Shooters

Attempting to identify a school rampage shooter is a difficult task, if not impossible (Cornell et al., 2004; O'Toole, 1999; Vossekuil et al., 2002). Profiling a school shooter is not a practice researchers suggest when attempting to prevent school violence (Langman, 2009a; O'Toole, 1999). Rather, researchers advocate for educators to be trained to identify warning signs and provide interventions when necessary (O'Toole, 1999). According to Langman (2012), warning signs are any attack-related behaviors or characteristics a student exhibits that demonstrate he or she is planning or fantasizing about carrying out an attack. Although warning sign lists can be generated from previous school rampage shootings, it is important to remember how turbulent adolescent development can be; at times, adolescent behavior can seem erratic as a student struggles with finding the balance of independence and dependence and need to feel accepted in the social environment (O'Toole, 1999). In the person-environment fit theory, the turbulent times of adolescence are magnified when a student experiences a gap in social needs and the environment, resulting in negative or antisocial behavior (Hunt, 1975;

Lewin, 1935; Murray, 1938). However, it is important to note not every suspicious behavior is the foreshadowing of a future crime.

Research on the history of a school rampage shooter shows that some shooters experience isolation from peers due to being a victim of bullying and lacking acceptable social skills (Crawford, 2002; Davies, 2008; Dogra, 2008; Duplechain & Morris, 2014; Harter et al., 2003). This is synonymous with the person-environment fit theory, which states a student will exhibit negative behaviors due to the deliberate ostracizing actions of peers (Eccles & Roeser, 2011). According to researchers, the increased academic rigor has been an added pressure to a student in the school environment (Climie & Altomare, 2013; Koth, Bradshaw, & Leaf, 2008). The increased rigor coupled with deficient friendships can be a dangerous combination for students.

According to a study by McGee and DeBernardo (2003), who analyzed 10 school rampage shootings from 1993 – 1999, school rampage shooters premeditated the attack in an act of revenge; the school rampage shooters had a strong interest in weapons and experienced extreme anger. Peter Langman, a psychologist focusing in the area of school shootings, categorized three types of school rampage shooters: traumatized, psychotic, and psychopathic (Langman, 2009a). Traumatized shooters come from a background of sexual, physical, and emotional abuse from parents experiencing drug abuse problems (Langman, 2009a). Psychotic shooters exhibit mental health illness characteristics such as hallucinations and delusions; these shooters reported hearing voices and exhibited signs of having a break in reality prior to the shooting (Langman, 2009a; Rocque, 2012). Finally, psychopathic shooters are narcissistic, feel no empathy for others or animals,

have extreme feelings of aggression, and feel superior to others (Borum, 2000; Langman, 2009a; Rocque, 2012; Twemlow et al., 2002).

In 2003, James McGee and Caren DeBernardo created a behavioral profile of a classroom avenger, a title given to a White, adolescent male who seeks revenge with firearms resulting in a multi victim homicide situation. This report reviewed 15 school rampage shootings that occurred between 1993 and 1999. In these shootings, the revenge of the students was spurred from discipline by teachers and administrators, breakups with girlfriends, or rejection from peers (McGee & DeBernardo, 2003). After reviewing the demographics and behavioral backgrounds of the classroom avengers, McGee and DeBernardo found all classroom avengers came from middle class families in rural environments.

The following sections are warning signs of previous school rampage shooters. However, researchers are quick to point out that students exhibiting these behaviors or characteristics most often do not commit violent crimes (Bernes & Bardick, 2007; Sewell & Mendelsohn, 2000; Vossekul et al., 2002). According to Bernes and Bardick (2007), the more warning signs or risk factors a student exhibits the more he or she needs to be monitored by educators. These warning signs only attempt to educate administrators, counselors, teachers, and other staff members of students who may be in great distress.

Family environment. Adolescence is a time of strain on the relationship between parent and child (Buchanan, Eccles, & Becker, 1992). In person-environment fit theory, shifts in family relationships that are viewed as negative decrease a child's self-esteem (Gutman & Eccles, 2007). One of the greatest tasks of an adolescent is to establish autonomy from his or her parents (Eccles et al., 1993; Gutman & Eccles, 2007; Smetana,

2000). This autonomy leads to the discovering of developing oneself outside of the family unit, which can result in family tension. This tension can have an adverse effect on a teen's behavior, which can result in delinquent behavior and create an environment where the child runs the household (Gutman & Eccles, 2007; Twemlow et al., 2002). Farrington (1994) found common themes within a child's environment that emerged among youth with chronic antisocial behaviors such as strict parental discipline policies and lack of interest in a child's activities.

The home environment is critical for developing a student's feelings of self-worth, as well assertiveness and independence. According to Bernes and Bardick (2007), students who did not develop these skills in the home environment lack the ability to problem solve effectively, which may lead to erratic decision making. Nonbehavioral signs of at-risk students include lower economic families, broken families, immigrants, and those with a history of domestic violence and abuse (Satcher, 2003; Climie & Altomare, 2013; Duplechain & Morris, 2014; Farrington, 1994). Langman (2009a) described traumatized rampage shooters as students with fathers who have a criminal history oftentimes involving the misuse of weapons. Psychotic shooters tend to be the outcast of the family and are often overshadowed by the high-achieving siblings (Langman, 2009a). For example, Kip Kinkel of the Springfield, Oregon, shooting had a talented sister who was in college on a cheerleading scholarship and described as a successful student in high school at the time of the shooting (Salyers, 2008). Langman (2012) stated many parents of school rampage shooters were aware of their child's erratic behaviors that should have served as a warning signs for future actions. For example, Kinkel's parents began to notice an increase in violence when Kinkel purchased books on

how to build bombs and bought a sawed-off shotgun (Salyers, 2008). Finally, Twemlow et al. (2002) stated violent teens tend to have unlimited and unsupervised Internet access.

According to Langman (2009a), traumatized shooters have a childhood of abuse experiences. Thirteen-year-old Mitchell Johnson of the Jonesboro, Arkansas, attack in 1998 had a rough childhood with an abusive and volatile father; he has also been sexually abused by a boy for several years (Langman, 2009a). Red Lake, Minnesota, shooter Jeffrey Weise had a mother who was an alcoholic that continually abused him by hitting him with objects and locking him in a closet (Langman, 2009a). Springfield, Oregon, shooter 15-year-old Kip Kinkel had a family history of mental illness; these family cases included the shooter being in a mental institution as well as being suicidal (Langman, 2009a; Lieberman, 2006).

High-stakes education. In 2001, the Bush administration authorized Public Law 107-110: No Child Left Behind Act (NCLB) This act authorized schools to provide educational services to students identified as neglected or delinquent. Furthermore, NCLB declared schools to coordinate services for students and their families by allowing guardians to be active participants in the student's educational experience (U.S. Department of Education [DOE], 2001). The NCLB legislation increased accountability for school districts with the expectation of advanced placement offerings, minimizing the achievement disparities between at-risk and high-achieving students, and requiring all students to achieve proficiency on state assessments (DOE, 2001; Nims & Sandhu, 2007). With the increased curriculum rigor and higher expectations on testing, the school has become a competitive environment for students (Koth et al., 2008; Spratt, Shucksmith, Philip, & Watson, 2006). Coupled with increased academic expectations and

mental health illness, some students begin to have feelings of incompetence and insecurity in the school setting (Climie & Altomare, 2013; Coombes, Appleton, Allen, & Yerrell, 2013; Cuellar, 2015; Dogra, 2008; Duplechain & Morris, 2014; Finney, 2006; Harter et al., 2003).

Many researchers have found that school rampage shooters were of average or above average cognitive ability (Bushman et al., 2016; Vossekul et al., 2002). Upon reviewing the academic history of school rampage shooters, researchers have found the greatest link between academics and school rampage shootings is not the academic ability of the shooter, but the change in academic performance of the perpetrator before the shooting spree. Salyers (2008) found that rampage shooters had above average academic achievement; however, there was a decline in achievement before the rampage incident. As mentioned previously, Salyers reviewed school rampage shooter cases and the connection between the shooter and intelligence; Eric Harris and Dylan Klebold, of Columbine, were identified as talented and gifted, with Dylan identified earlier in life than Eric. It should be noted that high intelligence did not lead to high academic achievement (Salyers, 2008). For example, Kip Kinkel of the Springfield, Oregon, shooting scored in the 90th percentile for an intelligence test in second grade; however, he struggled greatly in the area of writing. Although Dylan Klebold was identified as academically gifted at an early age, his grades before the attack ranged from A's to D's (Salyers, 2008).

Lack of connections. Eccles and Roeser (2011) stated the dynamic of social relationships and the role peer connection plays in an adolescent establishing his or her identity; when an individual progresses into adolescence, that person goes through a time

of discovery trying to make sense of school culture. This school culture is rooted in the peer circles a teen is trying to join or has joined. In the person-environment fit theory, these social dynamics are influenced by school culture in which the groups exist (Eccles & Roeser, 2011). Shooters experienced a lack of connection with peers and family at home and in the school setting (Borum, 2000; Dogra, 2008; Duplechain & Morris, 2014; Harter et al., 2003; Jenson, 2007; Nims & Sandhu, 2007; Twemlow et al., 2002). According to Dogra (2008), persons lacking a sense of attachment to parents and unable to develop friendships are at risk for mental illness. Social rejection is a strong link between school rampage shooters (Dwyer, Osher, & Warger, 1998; Nims & Sandhu, 2007). Those individuals isolated in adolescence fall into two categories: the aggressive child or the sensitive child (Dogra, 2008). A person's mental health is impacted by peer perceptions of the person (Dogra, 2008). Vossekul et al. (2002) reviewed 37 cases of school rampage shooters and found 75% of school shooters experienced a relationship change before the attack, triggering the attack.

School shooters have shown signs of distress or raised suspicions prior to shootings (Climie & Altomare, 2013; Crawford, 2002; Dupelchain & Morris, 2014). Oftentimes, shooters will begin to withdraw or isolate themselves in social settings (Climie & Altomare, 2013). Virginia Tech shooter Seung-Hui Cho's selective mutism and extreme shyness struggles lead him to live isolated from peers as well as to have strained relationships with family (Davies, 2008; Duplechain & Morris, 2014; Jenson, 2007). Other shooters lacked peer approval and parent support and they were not involved in extracurricular activities in the school setting (Duplechain & Morris, 2014; Harter et al., 2003).

Leakage. Leakage for a school rampage shooter is when the perpetrator has revealed his or her plans to carry out acts of violence; leakage can be in the form of thoughts, feelings, and attitudes through journal entries, school assignments, drawings, or recruiting peers to contribute in violent crimes (Langman, 2012; O'Toole, 1999; Twemlow et al., 2002). Oftentimes, school rampage shooters have foreshadowed their intent to commit violent acts in school assignments; writings of nonfictional work is oftentimes a great indication of a student's plan to carry out an attack (Langman, 2012). Shooters have reached out to others about their ideas; the shootings are carefully planned and executed (Crawford, 2002; McGee & DeBernardo, 2003). According to Crawford (2002), in 80% of school shootings, the shooter had told one person, while 60% of shooters told two or more persons about their plans. Contributing to the idea of school rampage shooters voicing their plans, Vossekul et al. (2002) found 75% of shooters in 37 cases made their plans known. Daniels (2002) reiterated school rampage acts do not just happen; there has been thought and time spent on the incident.

A psychopathic school rampage shooter spends a considerable amount of time recruiting peers to carry out acts of school violence (Langman, 2009a; Twemlow et al., 2002). Andrew Golden in the Jonesboro, Arkansas, shooting encouraged his accomplice Mitchell Johnson to carry out the attack; however, it was reported Golden shot 25 rounds and Johnson shot only five rounds (Langman, 2009a). Eric Harris of Columbine was the mastermind of the plan encouraging Dylan Klebold to carry out the plan (McGee & DeBernardo, 2003). Luke Woodham of the Pearl, Mississippi, attack was a member of a satanic cult that encouraged Luke to carry out the attack; six of the group members were charged with conspiracy to commit murder (McGee & DeBernardo, 2003).

Masculinity. One of the greatest warning signs of a student committing a school rampage shooting is being a male (Kimmel & Mahler, 2003; Vossekuil et al., 2002). Kimmel and Mahler (2003) reviewed school rampage shootings from 1982 to 2001; the researchers make the statement that gender is the greatest warning sign for school rampage shootings. The patterns seen in the school rampage shootings from 1982 – 2001 were found in the area of masculinity (Kimmel & Mahler, 2003). Peers calling them gay or homosexual harassed perpetrators; gay baiting was a common theme among the school rampage shootings (Kimmel & Mahler, 2003). Interestingly, the school shooters were not teased for engaging in homosexual behaviors, but rather, they were teased for being different from the norm (Kimmel & Mahler, 2003). In the classroom avenger, McGee and DeBernardo (2003) found 100% of the school rampage shooters were males who were dubbed social outcasts.

Salyers' (2008) analysis of four rampage shooters reported the shooters becoming consumed with their image; the four perpetrators wrote of being called names and teased for their small statures and lack of popularity among other male peers. Eric Harris and Dylan Klebold of Columbine were teased; Evan Todd, a lineman on the football team, admitted students called them "homo" (Kimmel & Mahler, 2003). Pearl, Mississippi, shooter Luke Woodham was overweight and considered a nerd by peers; he was called "gay" and "fag" (Kimmel & Mahler, 2003). Michael Carneal of the West Paducah, Kentucky, shooting had his lunch stolen as well as having his pants pulled down in front of classmates; before the attacks, he was labeled gay by a gossip article circulating his school (Kimmel & Mahler, 2003). Evan Ramsey of the Bethel, Alaska, shooting and Gary Pennington of Grayson, Kentucky, shooting were teased for wearing glasses; Gary

was stuffed in a locker by other students (Kimmel & Mahler, 2003). These students did not conform to the average student in their school; they were perceived as gay due to their different behaviors and appearances. Duplechain and Morris (2014) spoke to the perpetrators targeting White, wealthy jocks to avenge their bruised masculinity.

Mental health illness. According to the U.S. Department of Health and Human Services (US DHHS, 1999), mental health issues not supported by special education must be observed in the social context of one's life before interventions can be established. Educators must be observant of students and note any concerning social behaviors (Hermann & Finn, 2002). Furthermore, researchers state 1 in 5 children experience symptoms or displays signs of mental health illness with only 5% receiving services outside of the school setting (Dikel, 2012). Satcher (2003) reported 8% of children with mental health illnesses receive services while 50% of children in the welfare system and 66% of children in the juvenile system need treatment. Due to the developmentally fluctuating developmental nature of adolescence, a student's mental health illness characteristics can be displayed in a variety of ways, making it difficult for school professionals to identify students suffering from such illnesses (Borum, 2000).

A study by Harris-Caldwell (2015) identified the most common diagnoses of mentally ill community college students to be anger, sleep disorders, depression anxiety, personality disorders, repetitive thought disorders, suicide, substance abuse, and psychosis. Factors such as the economy, culture, standard of living, working conditions, political, and social environment can affect mental health in society (Dogra, 2008; Satcher, 2003). If left untreated, mental health disorders can lead to increased crime, decreased chance of employment, lower income during employment, lower level of

education, increased chance of being in the welfare system, lower grades for students in school, and possible co-occurring mental health disorders (Climie & Altomare, 2013; Cuellar, 2015; Dikel, 2012; Gresham et al., 2006). Furthermore, mental health conditions such as personality disorders and narcissism can significantly increase a child's predisposition to violence (J.G. Johnson et al., 2000).

Some shooters have a history of mental health illnesses, for which they may or may not have been receiving services for (Davies, 2008; Duplechian & Morris, 2014; Hermann & Finn, 2002; Jenson, 2007). Staff members had referred the Virginia Tech shooter, Seung-Hui Cho, to the counseling services on campus during college; after the shooting, it was discovered Cho suffered from mutism and extreme shyness in high school, but services were not continued in college (Davies, 2008). Michael Carneal of the West Paducah, Kentucky, shooting exhibited odd behaviors while at school; students reported he wore capes to school, set off stink bombs, and drank salad dressing at lunch (Newman et al., 2004). Langman (2009a) reported Columbine shooter Dylan Klebold as having psychotic features; students described him as socially awkward and having difficulty making friends. His journal entries displayed a troubling use of grammar for someone of his intellectual ability; his writings also included his fears that others were out to get him (Langman, 2009a). According to Hermann and Finn (2002), some of the attackers were receiving treatment for their psychiatric diagnoses and “were noncompliant with their medication” (p. 51). These antisocial behaviors resulted in further isolation from peers, leading to feelings of loneliness (Kashani, Jones, Bumby, & Thomas, 1999).

Premeditation. Langman (2012) suggested school rampage shooters leave a trail of evidence the attack was coming. School rampage shootings occur due to the final straw mentality of the shooter; the combination of events caused the shooter to seek an outlet of emotions. After reviewing 37 school rampage shootings from 1974–2000, Vossekul et al. (2002) found 75% of school shootings were planned, with more than 50% of the shootings planned 2 weeks before they occurred. Furthermore, perpetrators leave the message that the rampage shooting was necessary or needed to prove a point (Langman, 2012). Red Lake, Minnesota, shooter Jeffrey Weise spent months exchanging e-mails with his cousin about planning a school rampage attack (Langman, 2009a). According to L. Stevens, Lynn, and Glass (2001), violent perpetrators have voiced their intentions through various forms such as journals, notes, or verbally. Twemlow et al. (2002) described the threat as an intricate form of communication that moves from a fantasy world into real-life scenarios with real targets and plans.

Revenge. Shooters feared being unknown to others; the murders and suicides provide them with revenge of those they feel mistreated them and the attention they never received at school (Duplechain & Morris, 2014; Poland, 2014). Many school rampage shooters believed they were heroes who needed to seek revenge against those who wronged them (Douglas & Olshaker, 1999; Hermann & Finn, 2002; Twemlow et al., 2002). Some researchers have identified school rampage shootings as a ceremonial affair with one final act; the perpetrators are seeking fame, something to be remembered by (Fast, 2008). The homicidal-suicidal plan of some school shooters is a theatrical performance aimed at garnering the attention they so desperately wanted from others (Fast, 2008; Rocque, 2012).

Twemlow et al. (2002) likened a violent or suicidal adolescent to that of a serial killer where they view their situation as having limited options, losing all rational thinking. They see only one way out of the current state they are in and take drastic action to relieve the mounting pressure. Students who carry out school rampage shootings have a fixed mindset about the visualizations and those who have played a role in causing the pain. The amount of violent fantasies and the pressure to stabilize their life are the ultimate factors for the school rampage shooter.

School environment. School culture is a common set of norms and values that drive the interactions between students, teachers, administrators, and other staff members; the culture is a reflection of the set of expectations or rules established by staff members (Bradshaw, Waasdorp, Debnam, & Johnson, 2014). As culture changes so do the beliefs, values, norms, and behaviors of society (Bandura, 2002). Eccles and Midgley (1989) have done work in the area of adolescent transition from an elementary setting to a junior high school setting; the change in school size and less personalized atmosphere can leave many teens feelings hopeless and alone. These school environmental changes coupled with physiological changes in adolescents led to negative behavioral outcomes (Eccles & Midgley, 1989; Gutman & Eccles, 2007). For the person-environment fit theory, the environmental factors are not congruent to the developmental needs of the student. With the increase in school violence, attention has been placed on the educational environment and the factors affecting a student's emotional state.

The school environment risk factors include a tolerance for bullying, preference toward a particular group of students, and lack of interventions provided to students (Hernandez & Seem, 2004; Furlong, Morrison, Chung, Bates, & Morrison, 1997; Quiroz,

Arnette, & Stephens, 2006; Sandhu & Aspy, 2000; Twemlow et al., 2002). According to Slayers' (2008) study of four rampage shooters' writings, the analysis of each case revealed the shooters felt they were marginalized in the school setting with the popular jocks receiving positive recognition and less popular students receiving little if any attention or recognition. Teachers can decrease risk factors at school by increasing supervision in the hallways and increasing teacher morale (Furlong et al., 1997; Stevens et al., 2001). Hermann and Finn (2002) noted the importance of taking threats of school violence seriously to help prevent future acts of violence.

The emotional well being of a student can suffer when the school culture is not seen as positive and inviting (Climie & Altomare, 2013; Dogra, 2008). As a student's group of peer relationships changes throughout adolescence, a teen experiences stress and worry over their social status; this can lead to an increase in a victim mentality, as well as lowered self-esteem (Eccles & Midgley, 1989). A student's self-esteem and self-perception are affected by the perceived peer opinions of one's self, as well as any experience of isolation or criticism by peers (Climie & Altomare, 2013). Students with smaller statures or inferior appearances, such as many of the school rampage shooters have, stimulate different social interactions from others (Kendall et al., 1984). These varying interactions can lead to social isolation or create greater social deficits for students, leading to a potential bullying situation.

Bullying has three components: repeated over time, intentional, and power imbalance (Bradshaw et al., 2014; Nims & Sandhu, 2007). The classroom avenger profile created by McGee and DeBernardo (2003) found 100% of the school rampage shooters felt teased or victimized by peers. According to Crawford (2002), 75% of school

shooters expressed extreme bullying and attacks by peers, while Vossekuil et al. (2002) found 66% of school rampage shooters studied were bullied or threatened by peers at school. Victims of bullying experience depression due to instability (social and academic), as well as sleeping difficulty, while bullies can experience a higher risk of adverse academic problems, violence in adulthood, and substance abuse problems (Bradshaw et al., 2014). According to Salyers (2008), Columbine High School students experienced bullying on a regular basis; the researcher described the high school as a “competitive and hostile” (p. 102) place.

Quiet-natured students who experience low self-esteem and social difficulties are at risk of being bullied (Duplechain & Morris, 2014; Harter et al., 2003; Jenson, 2007). School shooters expressed feelings of despair and rejection by peers. Although many school rampage shooters are victims of bullying (Larkin, 2007; Newman et al., 2004), researchers have a hard time making a definitive connection between bullying and school rampage shootings, as some perpetrators are reported as being bullies themselves (Fast, 2008; Langman, 2009a; Newman et al., 2004). Eccles and Roeser (2011) summarized that as the perception of school climate decreases the school violence and bullying increase, which in turn continues to worsen the school climate, thus leading to a negative person-environment fit theory.

Suicidal. Feelings such as humiliation, self-pity, hopelessness, and helplessness are associated with suicidal ideation (Bernes & Bardick, 2007). Students exhibiting these feelings and fantasizing about suicide may be at risk of committing violent behavior such as school rampage shootings. School rampage shootings usually end in suicide of the gunman (Rocque, 2012). Nims and Sandhu (2007) and Vossekuil et al. (2002) stated

there is a strong correlation between suicide and a person who commits homicide. In 37 school rampage shooting cases, Vossekuil et al. (2002) found 75% of the perpetrators had attempted suicide or had suicidal ideation, while McGee and DeBernardo (2003) found 94% of school rampage shooters were suicidal. School shootings have a homicidal-suicidal plan, which differs greatly from most homicides (Bushman et al., 2016).

Students with a family history of suicide, previous ideation of suicide, or access to weapons at home are more at risk for displaying suicide-related behaviors. Other risk factors that may lead to suicidal behavior include experiencing a traumatic event or experimenting with alcohol and drugs (Poland, 2014). According to Poland (2014), psychologist theorist Peter Langman stated some school shooters, such as the Red Lake High School shooter, suffered from traumatic events such as abuse or bullying that lead to feelings of depression and suicide.

Violence fascination. In the classroom avenger profile, McGee and DeBernardo (2003) found that 100% of the perpetrators had an interest in violence. According to Langman (2009a), a psychopathic shooter is fascinated with violence and even gets a thrill from inflicting pain on others or animals. The copycat component was oftentimes a motivator for school rampage shootings in the late 1990s (Newman et al., 2004; Rocque, 2012). Fantasizing about school shootings and killing or taking a strong interest in violent television or games are warning signs of a distressed adolescent as well as having access to weapons (Davies, 2008; Duplechain & Morris, 2014; Dwyer et al., 1998; Harter et al., 2003; McGee & DeBernardo, 2003; Poland, 2014; Rocque, 2012). Violent media has the ability to desensitize adolescents to violent acts, which creates a sense of fear within the

school culture (Goldstein & Conoley, 1998) and some adolescents even relate to the perpetrators they see (Nims & Sandhu, 2007).

One serious warning sign of future violent behavior is harming animals (Bernes & Bardick, 2007; Hermann & Finn, 2002; Nims & Sandhu, 2007). Springfield, Oregon, shooter Kipland Kinkel boasted to his peers he tortured animals (McGee & DeBernardo, 2003). Pearl, Mississippi, school rampage shooter 16-year-old Luke Woodham had written about the time when he beat his dog and set it on fire while the dog was still alive (Hermann & Finn, 2002). Identified by Langman (2009a) as a psychopathic shooter, Andrew Golden of the Jonesboro, Arkansas, shooting had a long history of abusing cats. He spent a considerable amount of time torturing cats by shooting bottle rockets at them, stuffing them through chain-link fences, and even killing them by slitting their throats (Langman, 2009a; Newman et al., 2004).

An accumulation of these warning signs should be taken seriously; patterns of violent behavior should raise red flags to adults (Dwyer et al., 1998; Hermann & Finn, 2002; Langman, 2012). For example, Golden of the Jonesboro killings had a history of criminal activity, tortured animals, killed his ex-girlfriend in the attack, and had a volatile demeanor with peers (Langman, 2009a). Columbine shooter Eric Harris was narcissistic, had violent writings, and felt he was above the law (Langman, 2009a). Jeffrey Weise of the Red Lake, Minnesota, shootings was abused as a child, discussed his attack plans with a person, and experienced the death of his parents (Langman, 2009a). While there is not a clear-cut list of warning signs for every school rampage shooter, it is important for educators to be trained to recognize the warning signs of a student who is suicidal and homicidal (Poland & McCormick, 1999). Furthermore, educators should be trained to

properly address the concerns by providing much needed support to the student without alienating the student from the school environment.

Threat Assessment

Researchers agree that schools are safer places than ever before (Cornell, 2010; Midlarsky & Klain, 2005; O'Toole, 1999; Vossekuil et al., 2002). However, threats of violence happen across the country. A threat is the intent of someone to commit a violent act or express harm to someone or something (Borum, 2000; O'Toole, 1999). The Secret Service and the FBI have urged educators to create a system for monitoring threats that happen in the school environment (O'Toole, 1999; Vossekuil et al., 2002). When assessing a threat situation, it is important to look at the preparation and planning a student has made, not just if the student makes a verbal threat; premeditation is a critical component of threat assessment (Borum, 2000; Cornell, 2010; O'Toole, 1999).

The school rampage shootings of the late 1990s garnered the attention of the FBI when shooter profiler Mary O'Toole worked with advisories to create a school shooter threat assessment (O'Toole, 1999). According to Daniels (2002), threat assessment is the process of gathering information about a situation and person to determine the level of risk regarding a student committing violent behaviors. Threat assessment is the procedures put in place to evaluate the threat severity and how plausible it is the person will carry the threat out (Cornell, 2010; Hermann & Finn, 2002). Threat assessments should take into consideration the language a student uses as well as previous behavior that would indicate a student is close to committing violent acts (Borum, 2000; Hermann & Finn, 2002). A checklist of particular warning signs can lead to misidentification of potential school rampage shooters (Bailey, 2001; Hermann & Finn, 2002; O'Toole, 1999;

Reddy et al., 2001). Rather, the threat assessment looks at the credibility of the threat and the extent to which the person who made the threat is motivated to commit the crime; it is important to analyze each threat individually as it occurs (Borum, 2000; O'Toole, 1999).

Langman (2012) urged educators to take threats seriously when a student exhibits warning signs: for example, if a student is in a state of depression, exhibits extreme anger, and has a fascination for weapons, then the adults must treat this as a threat to the safety of all students. O'Toole (1999) described types of threats: direct, indirect, veiled, and conditional threats. Direct threats are explicitly stated by a person, such as the violent writings and verbalizations by the school rampage shooters mentioned previously (O'Toole, 1999). Indirect threats are vague in details but have a specific victim, veiled threats are implied threats, and conditional threats are threats of violence if demands are not met (O'Toole, 1999).

FBI threat assessment. The threat assessment created by O'Toole (1999) identifies four prongs an educator uses to determine if the threat is credible and if the person has the resources and intent to carry out the threat: behavior characteristics and traits, family history and dynamics, school atmosphere and dynamics, and social dynamics. O'Toole stated schools should individually assess threats and most threats are foiled. Motivation is a critical factor in assessing a threat situation; motivation to make a threat can include revenge, anger, fear, or serve as a means to intimidate others. Furthermore, O'Toole noted persons who act on threats or make serious threats do not just strike unexpectedly; threats are oftentimes one of many signs a person is thinking of acting out in violence.

When assessing a threat situation, certain factors should be taken into consideration. Details and specifics of the threat made by a person are critical when determining threat level (Langman, 2012; O'Toole, 1999; Twemlow et al., 2002). These details would include facts such as the type of weapon, specific location and date, and itinerary of act (O'Toole, 1999). Furthermore, the perpetrator's emotion when the threat was made should be considered; attention to punctuation and content of threat would indicate the mental state of the person (O'Toole, 1999). Finally, the preceding circumstances to the threat need to be evaluated; these situations can include disciplinary action by a teacher or administrator or a negative encounter with a peer (O'Toole, 1999). The structure of the FBI Threat Assessment follows the same basis of the social cognitive theory. The social cognitive theory assesses student outcomes and attitudes through personal, behavioral, and environmental factors (Bandura, 2002; Pajares, 2002). Similarly, the FBI Threat Assessment gathers information from four areas of a perpetrator's life: behavior traits, family dynamics, school dynamics, and social dynamics.

Prong 1 - Behavioral characteristics. Prong 1 is the behavioral characteristics and traits of the person making the threat exhibits. Behavioral characteristics review a person's personality; personality greatly impacts a person's self-view and world-view (O'Toole, 1999). Furthermore, personality can strongly influence how a person interacts with peers, family members, and other individuals. Monitoring and understanding a student's personality, especially noting the changes in behavior, is critical for assessing the threat a student makes.

One of the strongest behavioral traits that people exhibit before an act of extreme violence is leakage (Bushman et al., 2016; Newman et al., 2004; O'Toole, 1999). Educators should pay special attention to threats that are displayed through writings, class assignments, and verbal, written, or social media as these "leaks" relay a student's attitudes, desires, and fantasies of violence (O'Toole, 1999; Twemlow et al., 2002). Furthermore, students in a desperate state will begin to recruit or lure peers to join their efforts of perceived justice (Bushman et al., 2016; Langman, 2012; O'Toole, 1999). Langman (2012) warned educators that school rampage shooters will foretell their plans in written assignments. Leakage should be viewed as a serious threat to be investigated.

Researchers identified specific behaviors of violent people that are categorized under prong 1; these behaviors include strong sense of entitlement, superiority, and manipulation along with a lack of empathy (O'Toole, 1999; Nims & Sandhu, 2007; Twemlow et al., 2002). Bushman et al. (2016) describes these same behaviors as narcissistic, Machiavellianism, and psychopathy; Paulhus and Williams (2002) classified these three behaviors as the Dark Triad of Personality. According to Bushman et al. (2016), Machiavellianism is described as a person who seeks control and power through manipulation, which sometimes results in violent behavior and aggression. Bushman et al. (2016) linked Machiavellianism to bullying in the school environment; at times, students who have been ridiculed and teased reach a breaking point of needing to avenge their pain.

O'Toole (1999) alerted educators to monitor students who exhibit low self-esteem through immature coping skills and inappropriate behaviors. Furthermore, when a student shows signs of depression, a school member should be attuned to the student's actions;

the signs include drastic change in emotion or attitude and agitation towards others (Bernes & Bardick, 2007; O'Toole, 1999). Students will act out these behaviors in a plea for help oftentimes through suicidal ideation (O'Toole, 1999). Suicidal ideation coupled with feelings of hopelessness can create desperation in a student.

Fascination of violence is another behavior characteristic students will show when premeditating violent acts themselves (Borum, 2000; O'Toole, 1999). Fascination can be in the form of idolizing past school rampage shooters; furthermore, if a student indicates these school rampage shooters were justified in killing, then immediate intervention is needed (Langman, 2012). Fascination can also be in the form of entertainment the student chooses to engage in through video games, books, or computer activity (O'Toole, 1999). Bushman et al. (2016) noted fascination and committing a school rampage shooting are not directly related; however, fascination with violent media is linked to aggression in students.

Prong 2 - Family dynamics. Prong 2 is the family history and dynamics of the person making the threat; in an in-depth analysis of the situation, an educator would look for family patterns of behavior that show common beliefs and values of members of the family (O'Toole, 1999). Bushman et al. (2016) noted the strong connection between family environment and youth violence; early childhood aggression and adolescent problematic behaviors, such as being a social outcast and engaging in substance abuse, can be linked to lack of parental attention, abuse, and lack of parent expectations and discipline. A turbulent upbringing can cause severe deficiencies in youth; stress due to physical or sexual abuse and unstable family relationships can create deficiencies in the brain functioning of reasoning through tough situations as an adolescent (Bushman et al.,

2016). The state of parent-child relationships has a strong impact on how the child approaches future relationships. The relationship of parents and children can be strained due to criminal history of the parents or the incarceration of the parents (Bernes & Bardick, 2007; Masten, 2013). Also, the relationship can be strained due to physical, emotional, or sexual abuse (Masten, 2013; O'Toole, 1999).

The lack of intimacy or the expression of affection between the immediate family members can have an adverse impact on children (O'Toole, 1999). McGee and DeBernardo (2003) recounted the history of school rampage shooters and described many shooter backgrounds that tell a story of parental divorce or a big move preceding the school rampage incident. Kimmel and Mahler (2003) highlighted the school rampage shooter's belief that parents did not hear their need for help and felt they did not care. The child's perception of the parent-child relationship is a critical piece of information to know.

As opposed to lack of intimacy, parents of school rampage shooters could fall into the category of not recognizing the warning signs in their child or caring about a pattern of negative behavior that is emerging. O'Toole (1999) described this type of family environment as the child ruling the home or the child serving as the primary decision maker. Oftentimes, school rampage shooters have a history of minor criminal activity before the shooting; however, some of the parents did not hold the students accountable for their actions (Salyers, 2008). When school officials contact parents, some parents will disregard the information or they fear confronting the student or do not have resources to address the issue (O'Toole, 1999).

Finally, O'Toole (1999) highlighted the accessibility to weapons as a possible risk factor for aggression as well as no limitations on media usage, including TV and Internet. Newman et al. (2004) and Vossekuil et al. (2002) analyzed previous school rampage shooters and found that easy accessibility to guns was a general theme among the shooters. The weapons in the home are not secured properly or students are not trained in the proper use of the weapons (O'Toole, 1999). Furthermore, students who habitually watch or engage in violent media are at an increased risk of aggressive behavior (Anderson & Bushman, 2001). Examples of school rampage shooters show the shooters had strong interest in violent video games (Salyers, 2008). O'Toole (1999) urged parents to survey their child's media usage; school rampage shooters have a history of researching violent resources.

Prong 3 - School atmosphere. Prong 3 is the school atmosphere and dynamics where the threat occurred; this dynamic includes the culture, belief system, and the role of the students of the school (O'Toole, 1999). O'Toole (1999) noted it is important to investigate the students' perceptions of the school culture. As a student moves through adolescence, the school environment becomes a strong influencer of behavior; students begin seeking relationships outside of the home and a student's development of self-esteem can be influenced by outsiders (O'Toole, 1999).

Students begin establishing their place in social circles at school. O'Toole (1999) recognized these social rankings as a pecking order with students at the top receiving more privileges and tolerance of inappropriate behaviors. However, students at the bottom of the pecking order are marginalized with their inappropriate behaviors, receiving stronger consequences (O'Toole, 1999; Salyers, 2008). O'Toole (1999) also

highlighted the code of silence students utilize when it comes to mistreatment of students and bullying situations. Students feel they cannot report teasing of other students to school personnel, nor do they feel comfortable approaching staff when a student may learn of another student's intent to exercise violence.

Finally, it is important for educators to assess the students' views of the state of the school's culture, not just the staff's perceptions (O'Toole, 1999). Staff should look at the attachments students have with the school. Staff observations need to include assessing whether a variety of programs and activities is offered to engage the diversity of students in the school. School attachment can include the friendships with peers and relationships with staff that are built or not built. School staff members need to support positive relationships among students and work to improve negative situations occurring in the school. When students do not experience a connection to school, they may feel rejected or like an outcast. Furthermore, educators need to assess if the school is promoting positive relationships among students or reinforcing negative behaviors of students.

Prong 4 - Social dynamics. Prong 4 is the social dynamic of the student making the threat; the social dynamic can include the community as a whole and the social group with which the student in question associates with (O'Toole, 1999). Social rejection is a critical preceding factor for school rampage shootings (Bushman et al., 2016). School shooters had gaps in their social ability and were not accepted by peers. Newman et al. (2004) found 78% of school shooters were socially rejected or considered outcasts by peers.

Researchers described how much adolescents desire to be accepted or attached to a specific social group (Borum, 2000; Hernandez & Seem, 2004; O'Toole, 1999). Bushman et al. (2016) identified peer hierarchies or social rankings in the school culture can create competitiveness and bullying situations. Students on the top of the hierarchies are more likely to tease students at the bottom of the hierarchies; students use aggression toward socially less inclined students to increase power among the social rankings (Bernes & Bardick, 2007; Borum, 2000; Dwyer et al., 1998). However, researchers did find that although school rampage shooters were teased or bullied by some peer groups, the shooters did have friends; the shooters had a friend or friends that had similar interests including engaging in delinquent behavior (Borum, 2000). Bushman et al. (2016) stated most school rampage shooters do not act alone. O'Toole (1999) encouraged parents and educators to pay attention to the types of groups students belong to including common interests they share and what they spend most their time doing when together.

Social rejection is a critical precursor to school rampage acts (Bushman et al., 2016; O'Toole, 1999). Newman et al. (2004) found some school rampage shooters failed at joining a desired peer group, which resulted in feelings of inadequacy and rejection. Rejection can lead to acting out through aggressive behaviors (Downey, Lebolt, Rincon, & Freitas, 1998). Masculinity is a critical social aspect for all adolescent males. Rejection from social groups can have adverse effects on a male's self-esteem and can create feelings of confusion and helplessness (Bushman et al., 2016; Agger & Luke, 2008). Borum (2000) linked the early onset of mental illness to overplaying the social rejection, leading to a depressive state.

The combination of risk factors from these four prongs increase a student's likeliness to commit acts of violence (Newman et al., 2004; O'Toole, 1999). Oftentimes, risk factors from different prongs can work together to adversely affect behavior (Bushman et al., 2016). Slater, Henry, Swaim, and Anderson (2003) stated aggression, rejection, and exposure to violent media have a negative effect on a student's behavior. As aggressive students try to gain access into a group and are rejected by that group, the socially rejected begin to seek relationships with other aggressive peers and watch violent entertainment (Bushman et al., 2016). This becomes a dangerous cycle.

Role of the School Counselor in Threat Assessment

States across the country model counseling standards from the American School Counselor Association (ASCA) framework that serves as a guide for school counselors. According to the ASCA Web site (2016), school counselors assist students in the areas of social and emotional, academic, and career to reach their full potential. Through the years, the role of the counselor has grown to encompass emotional services, administrative duties, testing coordination, scheduling, and academic support (Cinotti, 2014; Nims & Sandhu, 2007; Riley & McDaniel, 2000). Researchers agree the need for counseling reform is necessary to be relevant to students in today's schools (Astramovich, Hoskins, Gutierrez, & Bartlett, 2013; Cinotti, 2014).

Comprehensive counseling program. In 2012, the ASCA established comprehensive school counseling program guidelines known as the national model to clarify the essential purpose of school counselors: foundation, delivery system, management, and accountability (Astramovich et al., 2013; Cinotti, 2014). The model contains five components: a) goals of services for counselors, b) student-focused

interventions, c) counseling services buy-in of all staff, d) implementation with purposeful design, and e) effective leadership, critical for sustainability and success of programs (Cinotti, 2014). Ultimately, the counselor should serve as an advocate for students in social and academic development (Cinotti, 2014). Lapan, Gysbers, and Sun (1997) found that students who are part of school environment that implements a comprehensive school counseling program felt safer at school and more prepared to handle negative situations.

According to Sullivan (2012) and Cowan, Vaillancourt, Rossen, and Pollitt (2013), the role of counselors in today's schools is multifaceted, with direct individual or small group counseling being the primary focus, followed by classroom curriculum integration, as well as serving as a mentor to teachers on how to handle extreme student behaviors (Riley & McDaniel, 2000). Furthermore, counselors form partnerships with families, outside agencies, staff members, and other community members to provide services to students (Riley & McDaniel, 2000). Finally, school counselors provide social and emotional support services (Nims & Sandhu, 2007). According to Adelman and Taylor (2000), there is a need for the role of the school psychologist and school counselor to be redesigned to accommodate the need for mental health services.

Accreditation organization. The CACREP publishes standards for secondary counselor certification programs to follow when creating courses (Adkison-Bradley, 2013; Branthoover et al., 2010). The CACREP standards that are specific to school counselor programs include assessment, foundations, counseling prevention, academic development, collaboration, research, and advocacy (Branthoover et al., 2010). The CACREP standards were created in 1988 with changes in 1994, 2001, and 2009

(Adkison-Bradley, 2013). The 2009 standards brought forth crisis and disaster training for counselor curriculum, which was immersed in course work and clinical experiences (Adkison-Bradley, 2013; Binkley & Leibert, 2015; Bobby & Urofsky, 2008; Branthoover et al., 2010).

According to Minton (2011), counselors report having to address crises during the school day and are concerned about the lack of crisis preparation. The 2009 CACREP standards put an emphasis on the need for crisis intervention as well as the need to understand the fallout of crises that arise (Minton, 2011). Carlson and Kees (2013) further emphasized the demands placed on school counselors to be the first line of defense in addressing student mental health issues, and they are often the ones that coordinate interventions for the students. In a study by Carlson and Kees, the researchers studied counselors' education and training in various areas. One of the lowest topics was crisis intervention. Overall, the researchers found that school counselors are not confident in working with students with mental health diagnoses. Furthermore, 88% of the respondents stated they did not have the time to address students with mental health due to the other duties assigned to them such as testing. The CACREP organization emphasizes the importance of schools working to diminish the no counselor duties assigned to all school counselors to free up time for addressing the mental health needs of students (Carlson & Kees, 2013).

Counselor experience. For many states, counselors can obtain positions without having previous teaching experience (Bringman & Lee, 2008; Peterson et al., 2004). These individuals receive a degree with a mental health background and complete fieldwork in schools to be certified (Smith et al., 2001). The second path to counselor

certification is earning a teaching degree and then completing additional hours in school counseling (Smith et al., 2001). Researchers stated advantages of teaching experience before becoming a counselor include having a grasp of academic struggles, school procedures, and teacher expectations (Olson & Allen, 1993; Quarto, 1999). Advocates for hiring counselors without teaching experience state work history, self-care, and building relationships as advantageous qualities they bring to the job (Peterson et al., 2004). Counselors with previous classroom experience do not show to be more effective in the school counseling environment (Bringman & Lee, 2008; Olson & Allen, 1993; Peterson et al., 2004; Quarto, 1999).

Duties of school counselors. With limited number of resources, the role of the counselor will vary among grade levels (Astramovich et al., 2013). According to Daniels (2002), counselors are in optimal positions to identify students who are at risk of committing extreme acts of violence. Through a descriptive, qualitative study of 470 kindergarten through high school counselors, Sullivan (2012) stated high school counselors cited competing roles such as testing, scheduling, and vocational services versus elementary counselors who reported larger amounts of time spent on direct counseling services. Furthermore, Sullivan (2012) found 65% of 470 school counselors surveyed frequently addressed bullying and relational aggression issues.

A study by Dahir et al. (2009) found that middle school counselors are more involved than elementary or high school counselors in personal-social development tasks such as learning how to navigate relationships, formulate a sense of individuality, and make proper decisions. Furthermore, middle school counselors reported being highly involved in a student's academic activities such as maintaining good grades.

One area of focus for school counselors needs to include the school climate and the effects the climate plays on extreme acts of violence. Hernandez and Seem (2004) noted that school violence does not come in just the form of final culminating activities such as school shootings, but rather, there are subtle acts along the way. Counselors serve a vital role in implementing and coordinating efforts to bring awareness to bullying or lack of supervision that can lead to school violence. Clarke and Kiselica (2000) urged school counselors to observe the role male socialization plays on bullying, which ultimately affects the school culture.

Counselors and school safety. With rampage school shootings saturated throughout the media, school counselors have a legal obligation to help keep students safe at school (Hermann & Finn, 2002). The role of the school counselor in violence prevention is multidimensional. Prevention is key for extreme acts of violence, and the counselor can assist by implementing school-wide positive school climate activities (Harris & Jeffrey, 2010). The greatest assistance school counselors can provide is having awareness of students who possess a risk for committing violent acts (Hermann & Finn, 2002). Early intervention in school violence is critical and counselors must assess particular students based on stressful events that may have occurred in their life, as well as recent behaviors and attitudes (Borum, 2000; Riley & McDaniel, 2000). While criminal profiling of a student is not a suggested practice, researchers do suggest conducting threat assessments to gauge a student's potential for violence (Hermann & Finn, 2002). A threat assessment observes the warning signs and changes in student behavior displayed within the environmental and developmental settings (Riley &

McDaniel, 2000; Twemlow et al., 2002); this is a proactive approach to violence as opposed to a reactive approach.

Hermann and Finn (2002) provided recommendations for school counselors to follow to address violence prevention, with one being the focus on creating procedures for teachers to follow when they suspect a student may be violent. Effective procedures should address school-wide and individual interventions. Additionally, counselors need to assess the threat by observing the language used in the threat as well as noting any previous behavior that might indicate the student is violent or suicidal (Hermann & Finn, 2002). Riley and McDaniel (2000) discussed the recommendations by special task forces for counselors across the country to help in preventing school rampage shootings. One key factor on which the research is focused was strong communication between school counselor and parents; the counselor should always strive to include the parents in any concerns that arise academically, socially, or behaviorally. Furthermore, the special task forces urged school districts to provide more in-depth training for counselors to handle violent acts, as well as a greater emphasis being placed on counseling services in general.

With the increasing demand for counselors to serve as the gateway between student mental health issues and outside services that can be provided, it is important that effective counselor education programs are established to better equip counselors. Counselors are in a pivotal role to prevent school violence through early detection and intervention (Harris & Jeffrey, 2010). Dahir et al. (2009) found that priorities of school counselor trainings and opportunities of trainings vary across the nation. When the school counseling program provides a balance between the emotional and academic needs of a

student, then a student's social, emotional, or academic barriers will begin to diminish to bring about success in the school environment (Nims & Sandhu, 2007).

Vignettes in Research

Vignettes are narratives based on a hypothetical situation that prompts the participant to respond to the detailed situation (Finch, 1987); a vignette is a utilized method in the social science, health, psychology, and education fields (Barter & Renold, 2000; C. Stevens, 2014). These short stories serve to elicit responses from participants to gain an understanding of how people in similar fields will react and what judgments will be made in certain social and ethical situations (Barter & Renold, 1999; Caro et al., 2012; Jeffries & Maeder, 2005; Miller & Bukva, 2001; Wason, Polonsky, & Hyman, 2002). A vignette is a valuable research tool that allows a researcher to explore sensitive topics and a person's beliefs (Barter & Renold, 1999; Finch, 1987; Jeffries & Maeder, 2005). Furthermore, vignettes should be constructed to reflect a real-life, believable scenario that allows researchers to manipulate variables to assess how these variables affect the decisions a person makes (Finkelstein & Brannick, 2000; Wason et al., 2002). Researchers of situated learning theory state the value of vignettes is found in garnering responses that align to how participants would actually behave as opposed to an interview (Kennedy, 1999; Leatham, 2006).

The creation of the vignette is extremely critical to provide valid results (Errington, 2011; Schoenberg & Ravdal, 2000). Researchers provide suggestions for creating a vignette that is realistic, yet inconclusive, to elicit authentic answers. Scenario methodology should be a mixture of research and personal experience characteristics (Finch, 1987; Gould, 1996; Hughes & Huby, 2004; Kalafat, Elias, & Gara, 1993; Simon

& Tierney, 2011). Furthermore, vignettes should be purposefully vague to allow for participants to generate authentic responses (Simon & Tierney, 2011). This vagueness creates a real-life situation since educators are not always aware of every aspect of a student's life. The researcher used a constant variable value vignette (CVVV) when designing the study. A CVVV states the participants receive the same vignettes. This type of design looks at specific characteristics and holistic approach to vignettes (Caro et al., 2012).

Summary

This chapter provided an overview of the appropriate and inappropriate behaviors of adolescents. After appropriate and inappropriate behaviors were discussed, the warning signs of a school rampage shooter were described. Warning signs of school rampage shooters as found by other researchers in the field were described in detail along with examples of school shooters who displayed those warning signs. The threat assessment created by FBI criminal profiler Mary O'Toole (1999) in, *The school shooter: A threat assessment perspective*, described focusing on the behavior characteristics, family history and dynamics, school environment, and social dynamics. Finally, this chapter reviewed current school counselors' roles in the threat assessment process.

Chapter Three describes the method utilized by the researcher to determine the ability of school counselors to identify students who exhibit warning signs of school rampage shooters. This chapter also outlines the collection of data from a written vignette and the thematic analysis used in the areas of behavior traits, family dynamics, school environment, and social dynamics. Chapter Four provides a presentation of the findings.

Chapter Five provides a summary of this project and the educational implications and significance of these findings for educational decisions and future studies.

CHAPTER THREE

METHODOLOGY

Introduction

The purpose of this quasi-experimental design study was to evaluate a counselor's ability to identify students who exhibit warning signs of school rampage shooters. For the purpose of this study, school rampage shootings were shootings committed by current or former students on school property where the victim(s) may or may not be connected to the perpetrator (Langman, 2009a; O'Toole, 1999). Creswell (2008) defined qualitative research as the utilization of inquiry-based methods to discover a social problem. According to Stake (1995), a characteristic of qualitative research questions is addressing the societal phenomena that exist and determining relationships. Barter and Renold (2000) expounded upon qualitative research to include the use of vignettes as a methodological tool; vignettes have increased in popularity when researching people's attitudes and moral standards about a given ethical situation. Vignettes have the ability to truly capture one's voice while taking less money and time to conduct as compared to observational studies (Hughes & Huby, 2002; Schoenberg & Ravdal, 2000).

The researcher determined to utilize a vignette due to the inability to observe a school shooter. The researcher created one vignette to determine the counselor's ability to identify warning signs of school rampage shooters. The vignette detailed a school rampage shooter created from the work of FBI criminal profiler Mary O'Toole (1999) in the areas of behavior traits, family dynamics, school environment, and social dynamics. The participants answered questionnaires based on the vignette. The counselor responses were used to determine the effectiveness of current counselors' abilities to identify the

key traits of a potential school shooter. The early identification of a student with particular key traits would allow school personnel to intervene before a devastating act is committed.

Vignette Development

This study was a quasi-experimental design study using a vignette questionnaire methodology of a school rampage shooter and a student who was not a school rampage shooter. A vignette is a written narrative describing a story or particular situation (Hughes, 1998). In this case, the vignette was based on a school rampage shooter displaying warning signs identified by FBI criminal profiler O'Toole's (1999) publication, *The School Shooter: A Threat Assessment Perspective*. A vignette methodology was selected due to the sensitive nature of school rampage shootings and the inability to create a school rampage-shooting incident. Researchers have identified warning signs that school rampage shooters exhibited before the attack or planned attack. O'Toole's (1999) four prongs are linked to Bandura's (2002) social cognitive theory. Bandura stated a person's sense of self-efficacy is shaped by the experiences in social environments such as school and family (Bandura, 2002; Pajares, 2002). Pajares (2002) explained a person's self-efficacy is created from a collection of sources; one of these sources includes social modeling, where a person tries to imitate another person's actions. This directly links to O'Toole's family, school, and social dynamics. The people in a student's family, school environment, and social circle will have a direct impact on how the student acts in given situations. Twemlow et al. (2002) stated a student is shaped by the family, school, peer group, and community environments, with each experience influencing the student.

The researcher created the vignette instrument used as an evaluation of a counselor's ability to identify students who exhibit warning signs of school rampage shooters based on the primary research questions and sub-questions. Hughes and Huby (2004) warned the use of unrealistic or unbelievable situations and characters would lead to hypothetical responses. The vignette was created to portray warning signs identified in the literature review without depicting an eccentric character (Finch, 1987; Hughes, 1998); however, due to the history of school rampage shooters, erratic behavior was often a precursor to the extreme act of violence. The school counselors were asked to identify the warning signs they found in the areas of behavior traits, family dynamics, school environment dynamics, and social dynamics. The researcher selected these four areas of a student's life to examine because of the person-environment fit theory. According to Eccles and Midgley (1989), person-environment fit theory states a person's behavior is greatly influenced by the persons and features of the person's surroundings. Conversely, when a person's environment challenges the person's needs and goals, the person exhibits negative behaviors (Hunt, 1975; Lewin, 1935; Murray, 1938). After reading a vignette, participants were asked to answer closed-ended (see Appendix A) or open-ended (see Appendix B) questions about the vignette (Schoenberg & Ravdal, 2000; C. Stevens, 2014). According to Schoenberg and Ravdal (2000), the questions about the vignette "elicit rich but focused responses from informants" (p. 63).

Phase I. This study was broken down into three phases to ensure research bias was avoided. The first phase of the research design was creating the vignette. The researcher utilized the basic methodology procedures described by Campbell (1996); the researcher identified the warning signs to be addressed before creating the vignette. The

identified warning signs were used to generate a vignette based on realistic information from an in-depth literature review. To avoid bias in the creation of the vignette, the researcher garnered the input of two secondary counselors to ensure the narrative had clarity when addressing traits of a shooter. The two counselors used to create the vignette worked in a middle school building in southwest Missouri; the building had 850 sixth and seventh graders. The school district was in a suburban community. The counselors were both females. One counselor had been in the school counseling field for 9 years and private practice for 14 years. She had a Master of Arts (M.A.) degree in Counseling with her School Psychologist Examiner Certification, and was also a Licensed Professional Counselor. The second counselor has been in the school counseling field for 8 years and 13 years working in mental health. She had her Master of Arts (M.A.) degree in Counseling and School Counseling.

Also part of Phase I, the researcher sent the survey questions (see Appendix C) to an expert panel made up of five retired counselors to review the validity of the questions. The expert panel reviewed the questions to determine if the question prompts matched the objective of the question. The researcher used a three point scale to determine the validity. The survey results of the expert panel supported the construct validity of the survey with an inter-class correlation value of $+0.714$.

Phase II. In the second phase, the researcher administered the vignette to a pilot group similar in characteristics to the study participants to assess the reliability of the study. The pilot group was made up of 16 secondary counselors from Missouri. The characteristics of the pilot group included nine members who received their degree 2009 and later and seven who received their degree earlier than 2009. Also, three members had

previous mental health experience and two have mental health degrees. Eleven members had less than 15 years of experience in school counseling and 4 members had 15 or more years of experience. This pilot group reviewed the narrative to determine if the key characteristics of school shooter could be identified with accuracy based on the narrative the particular vignette provided. The researcher administered the open-ended survey (see Appendix B) to eight members of the pilot group and the closed-ended survey (see Appendix A) questions to eight other members of the pilot group. The pilot group provided feedback via e-mail. The results of the pilot group supported the reliability of the survey with a Cronbach's Alpha value of .876.

Phase III. The third and final phase began with the researcher soliciting counselor interest by sending out the two surveys, including a demographic portion, through QuestionPro. The demographic questions included the following elements: gender, grade levels in building, number of years in educational counseling, previous teaching or mental health experience, number of years since highest degree, and community makeup (rural, urban, or suburban). After collecting willing participants through QuestionPro, the researcher placed the secondary counselors into two homogenous groups based on year of certification. The researcher divided participants with previous teaching experience and those with previous mental health experience evenly among the subgroups. Group 1 consisted of 48 counselors who received their degrees before 2009 while Group 2 consisted of 55 counselors who received their degrees 2009 or after. Due to the changes in the CACREP standards in 2009, the researcher selected 2009 as the year of examination to see if the inclusion of trauma training

included in the standards affected the counselors' ability to identify students exhibiting warning signs of school shooters.

The researcher constructed four subgroups where Subgroup A (Group 1) had 21 counselors, Subgroup B (Group 1) had 27 counselors, Subgroup C (Group 2) had 27, and Subgroup D (Group 2) had 28. Subgroups A and C received the vignette that solicited responses through open-ended questions (see Appendix E) and Subgroups B and D received the vignette that solicited response through closed-ended survey (see Appendix A). The participants were instructed to read the vignette and answer the questions pertaining to the vignette. The researcher gave the participants open-ended questions (see Appendix B) to answer and half closed-ended questions (see Appendix A) to answer to assess the counselor's ability to identify warning signs students may exhibit. The researcher wanted to know if the changes in the 2009 CACREP standards allowed counselors who obtained their degree after 2009 to more readily identify students exhibiting warning signs of school rampage shooter. The researcher expected counselors who obtained their degree after 2009 would be able to identify the students exhibiting warning signs of a school rampage shooter more accurately in the open-ended responses due to the training they received with changes in the CACREP standards. The researcher used the open-ended and closed-ended responses to determine if the 2009 CACREP standards better prepared counselors to identify students exhibiting warning signs of a school rampage shooter with prompting and without prompting. The third stage of research utilized QuestionPro to submit survey material.

This chapter includes a description of the participants and how the sample of Missouri school counselors was determined. A description of the research setting and

design utilized by the researcher is presented. The instrumentation of a written vignette is described along with the questionnaires that were used in the study. Furthermore, the analysis process utilized by the researcher is detailed.

Participants

The researcher surveyed secondary school counselors in Missouri as an evaluation of a counselor's ability to identify students who exhibit warning signs of school rampage shooters. Secondary grade levels includes 6-12 grade. The researcher selected school counselors due to their unique connection to students, teachers, and administrators. The selection process used by the researcher is described in the section below. Secondary school counselors usually have extensive background knowledge of students as well as take a strong interest in all aspects of the student. According to Eccles and Roeser (2011), the person-environment fit theory states students thrive in a school culture where students' needs are met. Counselors are able to observe the school culture and how students navigate the environment. Hughes and Huby (2004) stated when respondents have a vested interest in the contents of the vignette the quality of data collected will increase. The following primary research questions were used to guide the study:

1. To what extent can counselors identify the key traits of a school rampage shooter?
2. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage shooters for counselors that graduated prior to 2009 and those that graduated after 2009?

3. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage shooters for counselors that have previous mental health experience or training versus those who do not?
4. To what extent are school counselors trained to identify the behavioral traits typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
5. To what extent are school counselors trained to identify the family dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
6. To what extent are school counselors trained to identify the school environment dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
7. To what extent are school counselors trained to identify the social dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?

The researcher created a two surveys: open-ended (see Appendix B) and closed-ended (see Appendix A). Both survey included a demographic survey. The demographic portions included the year of counselor certification, years of experience, year of graduation, if the participant had previous clinical mental health experience, and the community make-up. After gathering responses of interested counselors, the researcher distributed the vignette and questionnaires to two groups of secondary counselors. Both

groups of counselors were made up of certified counselors from various regions in the state. Group 1, consisted of 48 participants, was counselors who received their degree before 2009 while Group 2, consisted of 55 participants, was counselors who received their degree 2009 or after. Each group was split into two subgroups where one subgroup from each group received a closed-ended survey (see Appendix A) and the other two subgroups received an open-ended survey (see Appendix B). This study represents approximately 97 school districts with school counselors. There were 105 counselor responses with 50 participants taking the open-ended survey and 55 participants taking the closed-ended survey. Two participants from the open-ended survey group did not enter a year of certification, so the researcher did not include those values when looking at the year of certification during data analysis.

In accordance with the guidelines of Southwest Baptist University regarding the protection of human participants, a request for review was submitted to the Research Review Board (RRB) for approval to provide a questionnaire. Upon receiving RRB approval, participant recruitment and data collect began. Participant consent was given by completing the online questionnaire for involvement in the study. Considering this study sought to identify school districts with school counselors, participant confidentiality and the lack of any foreseen harm to respondents were outlined in the questionnaire as minimal. All questionnaire data were stored on the researcher's computer with a secured password.

Selection/Sampling

Utilizing the Missouri Department of Elementary and Secondary Education database, a list of school districts with counselors was generated. The list was narrowed

to include only counselors that served in secondary buildings focusing on Grades 6-12. The interest survey containing demographic questions was sent via e-mail using QuestionPro software platform. The survey, along with a consent form (see Appendix D) was submitted to all Missouri principals who had a counselor in their building that worked with any grade 6-12. There were 135 principals who responded with permission to submit survey to the counselor(s) in the building. Any participant that completed the survey was entered into a randomized drawing for one of four \$10 gift cards. After receiving a response from the interested counselors, the researcher created two groups of counselors each: Group 1 had a degree before 2009 and Group 2 had a degree 2009 or after. The researcher constructed four subgroups where Subgroup A (Group 1) had 21 counselors, Subgroup B (Group 1) had 27 counselors, Subgroup C (Group 2) had 27, and Subgroup D (Group 2) had 28. The goal was to have a representative sample of counselors using demographic information. Subgroups A and C received an open-ended survey (see Appendix B) and Subgroups B and D received a closed-ended survey (see Appendix A). By completing the questionnaire of the written vignette of a school rampage shooter, the counselors provided consent for participating in the study. The researcher analyzed the questionnaire results for the four subgroups.

Research Setting and Data Collection

The scope of this study attempted to encompass all Missouri school districts that employed a secondary school counselor. Two surveys, an open-ended (see Appendix B) and closed-ended (see Appendix A), were submitted via QuestionPro to all secondary school counselors to garner participants to create the two counselor groups. The researcher divided participants into two groups. Group 1 consisted of 48 counselors who

received their degrees before 2009 while Group 2 consisted of 55 counselors who received their degrees 2009 or after. Once the two groups were generated, the researcher divided the group of counselors who earned their degree before 2009 into two subgroups with Subgroup A which had 21 participants and Subgroup B which had 27 participants. In addition, the researcher divided the group of counselors who earned their degree 2009 or after into two subgroups with Subgroup C which had 27 participants and Subgroup D 28 participants. All participants received the vignette while Subgroups A and C received an open-ended survey (see Appendix B) and Subgroups B and D received a closed-ended survey (see Appendix A). Upon completion of the open-ended questionnaires, the researcher reviewed the questionnaires to identify themes among the counselor responses in comparison to the closed-ended questionnaire rubric. The closed-ended questionnaires were analyzed using a rubric created by the researcher. The rubric consisted of the correct responses and the distractors the researcher used to write the vignette.

Instrumentation

Vignette. The researcher used a vignette to measure the counselors' abilities to identify school rampage shooters. The structure of the vignette was the same for the all counselors that received the questionnaires. The researcher created four paragraphs for the vignette. The vignette described a student by providing general background information along with the four areas from O'Toole's (1999) work: family, environment, social, and school. For the school shooter vignette, each paragraph had three key factors and two distractors. The key factors came from O'Toole's work while the two distractors were items people assume influence student behavior to commit a school shooting. The counselors received the vignette via e-mail.

Questionnaire. The researcher created a vignette that addressed the four researcher questions presented in the study. The questionnaire focused on four areas in a student's life: family, behavior, school environment, and social dynamics. The questions prompted the counselors to identify warning signs a student might display that might lead them to make the decision to harm their peers. A mixed method approach using opened-ended and closed-ended questions provided advantages of quantitative and qualitative studies (Finch, 1987). The researcher used opened-ended questions for half the participants and closed-ended questions for the other half participants to determine if the changes in the 2009 CACREP provided the appropriate training to assist counselors in identifying students who exhibit warning signs of school rampage shooter. The researcher wanted to know if the counselors need prompting or not to identify the warning signs.

In the closed-ended response (see Appendix A) or open-ended response (see Appendix B) portion of the questionnaire, respondents were asked to select the choices that are warning signs of a school rampage shooter. The researcher included one question for each section: family, behavior, school, and social. Each question had five to six choices from which to select responses. The researcher did add one open-ended question to solicit any additional comments the participant would like to make. Closed-ended questionnaires tend to be utilized in quantitative studies (Hughes & Huby, 2004); however, the closed-ended method can be part of a qualitative study. The researcher used the following questions to prompt the counselors to respond:

1. Select all family history warning signs of a potential school rampage shooter the student displayed in the written vignette.

2. Select all student behavioral warning signs of a potential school rampage shooter the student displayed in the written vignette.
3. Select all school environmental warning signs of a potential school rampage shooter the student displayed in the written vignette.
4. Select all social dynamics warning signs of a potential school rampage shooter the student displayed in the written vignette.
5. Is there other information that would be vital to assessing the student for potential to be a school rampage shooter?

The researcher selected these questions because school officials should monitor students who exhibit multiple warning signs from all four sections: family, behavior, school, and social. With the CACREP standards changing in 2009 to include training in traumatic events, the researcher assumed counselors graduating after 2009 had a more concrete grasp on identifying warning signs in the four categories.

The open-ended portion of the questionnaire was used to garner any information counselors could provide by reading the vignette. Four questions were asked to address the four sections: family, behavior, school, and social. The fifth question was used to gather any additional information the participant would like to contribute. Open-ended responses allow for more participant creativity as well as more realistic, meaningful responses (Hughes & Huby, 2004; Kalafat et al., 1993; C. Stevens, 2014; Sumrall & West, 1998). Counselors had to list the responses to the following the five questions:

1. List the student behavioral warning signs of a potential school rampage shooter the student displayed in the written vignette.

2. List the family history warning signs of a potential school rampage shooter the student displayed in the written vignette.
3. List the school environmental warning signs of a potential school rampage shooter the student displayed in the written vignette.
4. List the social dynamics warning signs of a potential school rampage shooter the student displayed in the written vignette.
5. Is there other information that would be vital to assessing the student for potential to be a school rampage shooter?

The researcher used these open-ended questions to gain insight on counselors' knowledge of the four areas school officials should monitor. With the inclusion of trauma training in the 2009 CACREP standards, the researcher assumed respondents that received their degree after 2009 would have a better understanding of the potential warning signs.

Reliability and Validity

Vignettes are derived from experts in the field of study and extensive literature review (Hughes, 1998; Kalafat et al., 1993). Differing from quantitative studies, when determining reliability and validity in a qualitative study, they are treated the same with words such as trustworthiness, transferability, and credibility (Golafshani, 2003). The researchers addressed trustworthiness through the creation of the vignettes. To create the vignette used for this study, the researcher used the expertise of two secondary counselors in the professional field and information based on real-life school rampage shooter cases. The counselors provided feedback based on their expertise to enhance the reliability and validity of the vignettes.

The researcher addressed the credibility of the study by addressing the internal validity. The internal validity of a vignette study is focused on the extent to which the researcher's vignette appropriately incorporates the characteristics of the research questions (Hughes & Huby, 2004). Furthermore, Gould (1996) stated internal validity is established when a solid literature foundation is used in the creation, as well as experts to review how closely the vignette conforms to that literature. The primary source of work used to create the vignette was that of the FBI and Mary O'Toole (1999) lending to the validity of the vignette. This section outlines the researcher bias that had the potential to appear in qualitative studies. Also, in this section, the researcher addresses the validity and reliability strategies that were implemented to ensure accurate data were collected.

Researcher bias. According to R. B. Johnson (1997), researcher bias occurs when a researcher does not accurately report the total scope of the study; researcher bias is most prevalent in qualitative situations because of the less structured methodology. To combat this dilemma, R. B. Johnson suggested the researcher address the potential bias that could occur through a strategy known as reflexivity. For this study, the researcher was an assistant principal in southwest Missouri at a middle school that housed Grades 6th through 7th. The middle school had a population of roughly 850 students in a suburb of a major city in Missouri. The free and reduced rate for the district was 39%. The middle school was 88% White with a predominantly White community.

The researcher's daily role as an assistant principal required close contact with students who presented challenging behaviors. The researcher also worked closely with the counselors to provide interventions for students who struggled in the academic setting. The relationship with the counselors and daily interactions with students could

have led to potential bias about how to handle student situations and what current interventions were available to students. Furthermore, the close relationship with the counselor provided the researcher with insight on what current curriculum standards were required of school counselors. The rest of the section is dedicated to addressing what strategies were used to reduce researcher bias.

Descriptive validity. R. B. Johnson (1997) states descriptive validity is a vital component of most qualitative studies and should be addressed. Furthermore, R. B. Johnson described descriptive validity as the accuracy of the data revealed in the study. The researcher used the strategy of peer review to address descriptive validity. When the responses from the participants were collected, the researcher showed the results to the two middle school counselors that helped create the original vignette. Through the peer review strategy, the researcher wanted to ensure data were not being misinterpreted.

Interpretive validity. According to R. B. Johnson (1997), interpretive validity is the researcher's ability to relay the participants' exact thoughts, feelings, and responses through the results. One way the researcher addressed interpretive validity was through participant feedback during the expert panel process. The researcher provided the closed-ended (see Appendix A) and open-ended (see Appendix B) surveys to the expert panel to check the credibility of the questionnaire. Utilizing the advice of R. B. Johnson, clearing up miscommunication is essential to valid results, the researcher met with the expert panel to review the answers submitted to clarify any responses or answer any questions the members had.

R. B. Johnson (1997) also suggested a strategy known as low inference descriptors be used by researchers to strengthen the validity of the study. The researcher

used this strategy by recording the participants' exact wording on responses of the open-ended questionnaire. Furthermore, the researcher used the strategy of pattern matching to interpret the open-ended data. Through pattern matching, the researcher looked at the completed open-ended questionnaires to find correlations among the participants' responses. After pattern matching the responses, the researcher took the responses back to the two counselors who helped develop the vignette to confirm the patterns that were found.

Reliability. To ensure the reliability of the vignette content, the researcher presented the vignette to an expert panel of counselors. The test group consisted of five counselors. These counselors were from southwest Missouri and were employed at the secondary level. The members of the expert panel were employed at school districts of varying size and demographic. Researchers suggest vignettes be reviewed by experts in the field to garner feedback before the study participants complete the survey (Gould, 1996; Hughes & Huby, 2004; Simon & Tierney, 2011). The researcher used a .70 or higher goal to establish reliability of the research questions. The survey results of the expert panel supported the construct validity of the survey with an inter-class correlation value of +.714.

Data Analysis

This quasi-experimental design study was conducted as an evaluation of a counselor's ability to identify students who exhibit warning signs of school rampage shooters. The researcher created a vignette used to measure the counselor's ability to identify the warning signs of school shooter in the four areas of behavior, family, school, and social using the work of FBI profiler Mary O'Toole (1999). Following the vignette,

participants responded to open-ended survey (see Appendix B) or closed-ended survey (see Appendix A). The researcher placed an asterisk next to the correct responses in Appendix A. The researcher created two groups of study based on year of certification. Group 1 consisted of 48 counselors who received their degrees before 2009 while Group 2 consisted of 55 counselors who received their degrees 2009 or after. Once the two groups were generated, the researcher divided the group of counselors who earned their degree before 2009 into two subgroups with Subgroup A which had 21 participants and Subgroup B which had 27 participants. In addition, the researcher divided the group of counselors who earned their degree 2009 or after into two subgroups with Subgroup C which had 28 participants and Subgroup D 26 participants. All participants received a vignette depicting a school rampage shooter. Subgroups A and C received the vignette that solicited responses through open-ended questionnaire and Subgroups B and D received the vignette that solicited response through closed-ended questionnaire.

The researcher utilized the SPSS analysis software to compare the four groups. For each secondary research question, the researcher recorded the number of correct and incorrect responses for all four subgroups. The researcher compared the average number of correctly identified warning signs in each category. The researcher compared the mean of each category for all four subgroups. The researcher expected Subgroup D, participants who received their degree after 2009 and answered the closed-ended responses, to have a higher average compared to the other three subgroups. Overall, the researcher expected Subgroups C and D, participants who received their degree after 2009, to have a higher average than Subgroups A and B, participants who received their degree before 2009. Also, the researcher expected the participants with a mental health

background, those that did not have a teaching background, to be able to identify more key traits than the participants with a teaching background.

Open-ended response. The data analysis of counselor responses of the school rampage shooter vignette was coded by themes. The researcher used the closed-ended responses to create the themes for the open-ended responses. Since the participants were selecting criteria from the given descriptions, the themes matched the options given in the closed-ended survey. The themes analyzed by the researcher were cross-checked with counseling professionals in the field to ensure research bias was not present. Each participant was asked to identify warning signs, or traits, in the vignette. The researcher scored all correctly identified traits. The researcher conducted a factorial multivariate analysis of variance (MANOVA) test to compare the mean difference level of correctly identified traits for Subgroups A and C. The null hypothesis was that year of graduation has no significant impact on a counselor's ability to identify warning signs of potential school rampage shooters. The researcher expected counselors who had received their degree after 2009 to more accurately identify traits exhibited by a school shooter. Furthermore, the researcher expected counselors with mental health certification, those that did not possess a teaching certificate, to be able to identify more key traits than the participants who had a teaching background. The researcher examined an interaction effect of the counselor education based on year of certification and the path to becoming a school counselor, teacher path or mental health path. The researcher conducted a factorial MANOVA design based on the two factors of years and type of survey.

Closed-ended response. The researcher created a rubric of correct responses for the closed-ended response questionnaire. The researcher scored all correctly identified

traits based on the created rubric. The researcher conducted a factorial MANOVA test to compare the mean difference level of correctly recognized traits for Subgroups B and D. The researcher conducted a univariate analysis of variance (ANOVA) for specific group differences to see the degree to which specific groups differ. The null hypothesis was that year of graduation has no significant impact on a counselor's ability to recognize warning signs of potential school rampage shooters. The researcher expected counselors who had received their degree after 2009 and responded to the closed-ended questionnaire to be the more accurate at recognizing traits of all four subgroups.

Primary Research Questions

1. To what extent can secondary school counselors identify the key traits of a school rampage shooter?
2. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage shooters for counselors that graduated prior to 2009 and those that graduated after 2009?
3. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage shooters for counselors that have previous mental health experience or training versus those who do not?

Secondary Research Questions

1. To what extent are secondary school counselors trained to identify the behavioral traits typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?

2. To what extent are secondary school counselors trained to identify the family history signs that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
3. To what extent are secondary school counselors trained to identify the school environment dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
4. To what extent are secondary school counselors trained to identify the social dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?

Statement of Null Hypotheses

1. There will be no statistically significant differences in secondary school counselors' abilities to identify the key traits of a school rampage shooter.
2. There will be no statistically significant differences in the identification of shooter warning signs between secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009.
3. There will be no statically significant differences in the identification of shooter warning signs between secondary school counselors with previous mental health experience and those without previous mental health experience.
4. There will be no statistically significant differences in the identification of behavioral warning signs between those secondary school counselors who

earned their degrees in school counseling before 2009 and those who earned them after 2009.

5. There will be no statistically significant differences in the identification of family dynamic warning signs between those secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009.
6. There will be no statistically significant differences in the identification of school dynamic warning signs between those secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009.
7. There will be no statistically significant differences in the identification of social dynamic warning signs between those secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009.

Summary

This chapter outlined the process and methodology for this study. A vignette methodology questionnaire was used as an evaluation of a counselor's ability to identify students who exhibit warning signs of school rampage shooters. The use of the questionnaire and its validity and reliability as the instrumentation for examining student data was also addressed. The plan for analyzing the data was then outlined utilizing thematic coding process to identify the warning signs of a school rampage shooter in the areas of behavior characteristics, family dynamics, school environment, and social dynamics. Chapter One contained a brief overview of school violence and the school

rampage shootings that have captivated America. It also outlined the need to examine the ability of school counselors to identify warning signs typical of school rampage shooter. Chapter Two provided a literature review of school rampage shootings, the warning signs of school rampage shooters, threat assessment of potential school violence, and the training of school counselors. Chapter Four will offer an analysis of questionnaire data for the process of implementation of intervention strategies by school counselors. Chapter Five will provide a summary of this project and the educational implications and significance of these findings for educational decisions and future studies.

CHAPTER FOUR

ANALYSIS OF DATA

Introduction

The purpose of this study was to evaluate a counselor's ability to identify students who exhibit warning signs of school rampage shooters. The theoretical basis for this study was Bandura's social learning theory, social cognitive theory, and self-efficacy theory. Also, the study was guided by person environment fit theory. These theories describe the reciprocal relationship that exists between person and person as well as person and environment (Bandura, 1977, 1986, 2002; Eccles & Midgley, 1989). The researcher attributes certain student actions to the previously stated theories. Furthermore, the researcher focused on student decision making in the form of warning signs displayed in the areas of family history, behavioral traits, social dynamics, and school environment. These four areas were identified from a threat assessment created by FBI profiler Mary O'Toole and the NCAVC in the summer of 1999. Currently, there is minimal research published surrounding the ability of counselors, along with their mental health background and relationships with staff and students, to help identify students before school rampage shootings occur. This study sought to determine if the updated CACREP standards in 2009 resulted in increased abilities in counselors to identify warning signs of a school rampage shooter.

In this chapter, data will be presented to provide input into the ability of school counselors to identify students exhibiting warning signs of school rampage shooter in the four areas of family history, behavioral traits, social dynamics, and school environment. The researcher used a counselor certification year of 2009 to determine if the CACREP

standards supported the mental health issues facing school counselors. Furthermore, the researcher wanted to determine if a mental health background made a difference in accurately selecting warning signs. The following questions were used for the survey and will be analyzed in this chapter:

1. To what extent can secondary school counselors identify the key traits of a school rampage shooter?
2. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage shooters for counselors that graduated prior to 2009 and those that graduated after 2009?
3. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage shooters for counselors that have previous mental health experience or training versus those who do not?

The following were the secondary research questions:

1. To what extent are secondary school counselors trained to identify the behavioral traits typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
2. To what extent are secondary school counselors trained to identify the family history signs that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
3. To what extent are secondary school counselors trained to identify the school environment dynamics that are typical of school rampage shooters by looking

at the differences between correctly identified traits and incorrectly identified traits?

4. To what extent are secondary school counselors trained to identify the social dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?

The researcher made the following correlating null hypothesis statements:

1. There will be no statistically significant differences in secondary school counselors' abilities to identify the key traits of a school rampage shooter.
2. There will be no statistically significant differences in the identification of shooter warning signs between secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009.
3. There will be no statically significant differences in the identification of shooter warning signs between secondary school counselors with previous mental health experience and those without previous mental health experience.
4. There will be no statistically significant differences in the identification of behavioral warning signs between those secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009.
5. There will be no statistically significant differences in the identification of family dynamic warning signs between those secondary school counselors

who earned their degrees in school counseling before 2009 and those who earned them after 2009.

6. There will be no statistically significant differences in the identification of school dynamic warning signs between those secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009.
7. There will be no statistically significant differences in the identification of social dynamic warning signs between those secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009.

The data were collected using one vignette depicting a school rampage shooter and two types of surveys, open-ended (see Appendix B) and closed-ended (see Appendix A), addressing the four threat assessment areas. The two surveys were sent to secondary school counselors who work with students in 6-12 grade through QuestionPro. There were 97 school districts represented in the survey results with 105 counselors responding to the survey. Upon the completion of the surveys, the data were collected and uploaded to the IBM Statistical Package for Social Sciences Statistics (SPSS) program for data analysis.

Demographic Results

Participants completed a demographic survey including both open-ended and closed-ended questions. The demographic survey results are displayed in Table 1. The researcher focused on the year of certification, mental health experience, and type of survey. The researcher focused on these three demographic question results due to the

primary research questions. Some participants did not indicate their year of certification, so the demographic results are based on $N = 48$ the open-ended survey.

Table 1

Demographic Survey Results

Demographic Groupings	Open-Ended Participants ($N = 50$)	Percent	Closed-Ended Participants ($N = 55$)	Percent
Certification Year				
Before 2009	Subgroup A 21	43.8	Subgroup B 28	51
2009 and After	Subgroup C 27	56.2	Subgroup D 27	49
Mental Health Experience				
Yes	12	24	10	18.2
No	38	76	45	81.8

Overall Survey Results

For both survey types, the researcher saw an overall 24% return rate on the surveys. Based on Table 1, there were a limited amount of respondents who had previous mental health experience. The researcher recorded the correct and incorrect responses for both open-ended surveys and closed-ended surveys. The independent variables or main effects for the data analysis were the type of survey taken (open-ended vs. closed-ended), the year of certification (before 2009 vs. 2009 or later), and mental experience (yes vs. no). The researcher used a MANOVA to compare the mean for the four threat assessment areas. Analysis of significance, at the .05 level, is included in the following narrative. Overall, the data showed only a significant difference for the type of survey participants took. Utilizing Wilks' Lambda to evaluate the group differences, the main effect of the open-ended question survey and the closed-ended question survey was significantly

different at the $p < .05$ level of significance, $F = 2.973$, $p = .000$. On the contrary, the participants who answered the closed-ended survey more readily identified the warning signs for a school rampage shooter than participants who took the open-ended survey. However, it is important to note the open-ended survey participants more accurately identified the warning signs for the social dynamics portion than the closed-ended participants. There was no level of significance for mental health experience or year of certification. Furthermore, the data did not show a level of significance for any interaction effects between the independent variables. One factor could be the different cell sizes between the open-ended and closed-ended participants.

Research Question 1

Research Question 1 was used to determine the counselor's ability to identify warning signs. As significant results were found, univariate ANOVA results allowed the researcher to examine the degree to which groups differed for each variable. The researcher found a level of significance, at the $p < .05$ level, between the responses of the open-ended and closed-ended survey results in 3 of the 4 threat assessment areas: family history, behavioral warning signs, and social dynamics. For the family history warning signs portion, there was a statistically significant difference between the groups in their ability identify access to guns as a warning sign; with the closed-ended group performing better than the open-ended group, $F = 14.879$, $p = .000$. Furthermore, there was a significant difference for the behavioral warning sign of a strong interest in hunting, $F = 23.730$, $p = .000$. The opened-ended participants more readily identified a strong interest in hunting as a warning sign. The student's strong interest in hunting coupled with access to weapons makes the interest in hunting a warning sign.

For the social dynamics warning signs, there were four responses that showed a significant level of difference for the two types of surveys (see Table 2). These responses were sitting by himself at lunch (Choice B), smaller build (Choice D), feelings of intimidation (Choice E), and the new relationship between Gabe and Elizabeth (Choice F). For the given vignette, Steven sitting by himself was not a correct warning sign in the social dynamics survey. The statically significant difference occurred due to more closed-ended participants erroneously identifying this particular warning sign than open-ended participants who did not identify it as a warning sign. The closed-ended participants more readily identified Steven’s feelings of intimidation as a warning. The open-ended participants were more accurate to identify Steven’s smaller build as a potential warning sign. Finally, the open-ended participants more accurately identified the new relationship between Gabe and Elizabeth as a potential warning sign.

Table 2

ANOVA Open-Ended Survey vs. Closed-Ended Survey for Social Dynamics Category

	Sum of Squares	<i>Df</i>	Mean Square	<i>F</i>	Sig.
Choice A	.094	1	.094	.398	.530
Choice B	3.639	1	3.693	20.139	.000
Choice C	.272	1	.272	4.466	.037
Choice D	2.272	1	2.272	12.217	.001
Choice E	5.769	1	5.763	35.196	.000
Choice F	6.0808	1	6.080	35.022	.000

Closed-ended responses. Overall, closed-ended survey participants more accurately identified warning signs from the vignette as compared to participants who completed the open-ended survey. All participants correctly identified two options from the behavioral warning signs category. The correctly identified options were harming animals and giving a specific date. Also, all participants correctly identified one option from the environmental warning signs category. The correctly identified option was the school turning a blind eye to bullying.

Open-ended responses. Overall, the participants did not readily identify the accurate warning signs in the given vignette for the four areas of the threat assessment, except for the social dynamics portion. The participants taking the open-ended survey more accurately identified Steven's smaller build and Gabe's and Elizabeth's new relationship as potential warning signs as compared to participants taking the closed-ended survey. The researcher scored the open-ended responses using the rubric from the closed-ended surveys. The researcher looked for common themes and language that corresponded to the closed-ended option for each question. The researcher examined an interaction effect of the counselor education based on year of certification and previous mental health experience.

Research Question 2

For Research Question 2, the researcher looked at the counselor's year of certification to determine if a statistically significant difference could be found. The researcher scored all correctly identified traits based on a created rubric.

Closed-ended responses. The researcher found that there was no statistically significant difference between the two subgroups. A school counselor's year of

certification did not show a main effect on the counselors' responses in the closed-ended survey. When looking at the individual questions, the researcher observed commonalities among the counselor selections for accurate warning signs (see Table 3) and incorrect warning signs. See the number of correct responses in the table below.

Table 3

Number of Correct Responses for Accurate Warning Signs for Closed-Ended Survey

	Subgroup B (<i>N</i> = 27)	Subgroup D (<i>N</i> = 28)
Family History, Choice A	26	26
Family History, Choice C	25	24
Family History, Choice E	13	22
Behavior Traits, Choice B	22	21
Behavior Traits, Choice C	5	4
Behavior Traits, Choice E	27	28
Behavior Traits, Choice F	27	28
School Environment, Choice A	27	28
School Environment, Choice D	27	27
School Environment, Choice E	18	20
Social Dynamic, Choice A	18	15
Social Dynamic, Choice D	4	4
Social Dynamic, Choice E	24	25
Social Dynamic, Choice F	11	11

The table indicates that more than 50% of participants, regardless of year of certification, correctly identified 10 of the 14 accurate warning signs. For the secondary research question addressing school environment, there were 50% or more of the participants who correctly identified all three warning signs. For behavior traits and family history, there were 50% or more of the participants who accurately identified 2 of the 3 warning signs. The participants graduating before 2009 did not readily identify lack of parent support for school discipline as a warning sign in the family history portion. Both subgroups scored poorly on the student's interest in hunting in the behavior traits portion. Finally, for the social dynamics portion, there were 50% or more of the participants who correctly identified two of the four warning signs. Both subgroups did not readily identify the student's smaller build and the new friendship formed between Gabe and Elizabeth. However, participants did readily recognize resistance to working in groups and feelings of intimidation.

Open-ended responses. The researcher found that there was no statistically significant difference between the two subgroups. A school counselor's year of certification did not show a main effect on the counselor's response in the open-ended survey. When looking at the individual questions, the researcher observed commonalities among the counselor selections for accurate warning signs (see Table 4) and incorrect warning signs. The table indicates that more than 50% of participants, regardless of year of certification, correctly identified 11 of the 14 accurate warning signs. For the secondary research question pertaining to the family history and behavior traits, there were 50% or more participants that accurately identified the warning signs. For the

school environment section, more than 50% of the participants accurately identified 3 of the 4 warning signs.

Table 4

Number of Correct Responses for Accurate Warning Signs for Open-Ended Survey

	Subgroup A (N = 21)	Subgroup C (N = 27)
Family History, Choice A	17	21
Family History, Choice C	14	14
Family History, Choice E	11	18
Behavior Traits, Choice B	16	22
Behavior Traits, Choice C	12	15
Behavior Traits, Choice E	20	26
Behavior Traits, Choice F	19	24
School Environment, Choice A	19	24
School Environment, Choice D	19	24
School Environment, Choice E	9	20
Social Dynamic, Choice A	15	16
Social Dynamic, Choice D	8	13
Social Dynamic, Choice E	8	14
Social Dynamic, Choice F	18	25

The participants that graduated before 2009 did not as readily identify the athletes having precedence over others as a potential warning sign when compared to group that graduated 2009 or later. For the social dynamic responses, there were more than 50%

participants who accurately identified 2 of the 4 warning signs. The two subgroups had more than 50% of the participants identify Gabe and Elizabeth's new relationship and resistance to working the group. Both Subgroups A and C did not have 50% of participants identify Steven's smaller build; however, the two subgroups from the open-ended survey did more readily identify the warning sign as compared to the closed-ended survey subgroups. Subgroup C had 51% of the participants correctly identify feelings of intimidation as compared to Subgroup A, which had 38% of participants.

Research Question 3

For Research Question 3, the researcher wanted to determine if a statistically significant difference occurred between participants who had a mental health background and those who did not when the ANOVA was run for just mental health experience. It is important to note the low number of participants with previous mental health experience. This could play a factor in the level of significance on responses. There was a statistically significant difference, at the $p < .05$ level, for one response option in the family history portion. For the response in the family history section that discussed parent drug use, those with mental health experience erroneously identified parent drug use as a warning sign, $F = 5.34$, $p = .023$. Parental drug use was not an accurate warning sign. Both survey groups had a high percentage of survey participants to select many correct warning signs for the given vignette. There were 80% or more participants from both groups who accurately identified lack of parent supervision, harming animals, specific date given, the school turning a blind eye to bullying, and lack of connection to school for students as potential warning signs. There were two areas where only 40% of participants from both groups correctly identified access to guns and smaller build as potential warning signs.

Closed-ended responses. For the closed-ended survey, the results of the MANOVA indicated there was a statistically significant difference, at the $p < .05$ level of significance, for one social dynamic question, $F = 4.93$, $p = .039$. According to the survey results, counselors without mental health experience more readily identified the new relationship between Gabe and Elizabeth as a potential warning sign. Despite mental health experience, both sets of participants correctly identified the school turning a blind eye to bullying, harming animals, and specific date given as potential warning signs. In addition, all participants with a mental health background selected lack of supervision, lack of connection at school, and feelings of intimidation as potential warning signs.

Open-ended responses. For the open-ended survey, the results of the MANOVA indicated there was no statistically significant difference between participants with a mental health background and those without a mental health background. There were commonalities in response selections. Ninety percent or more of participants for both groups correctly selected harming animals, specific date given, and the school turning a blind eye to bullying. There was less than 50% of the participants with a mental health background who correctly identified athletic precedence, smaller build, and the new friendship between Gabe and Elizabeth as potential warning signs. Less than 50% of the participants without a mental health background correctly identified harming animals and smaller build as potential warning signs.

Summary

The year of certification and mental health experience were not main effects, despite the type of survey, for school counselors when identifying potential warning signs of a school rampage shooter in the given vignette. The type of survey did result in

statistically significant differences in the responses of counselors. Those who completed the closed-ended survey more readily identified the warning signs in the family history, behavioral traits, and school environment. However, the open-ended survey participants more readily identified social dynamic warning signs. For mental health experience, the only statistically significant difference occurred in the participants with mental health experience who inaccurately identified parent drug as a warning sign. Chapter Four offered the analysis of the data collected. Chapter Five gives an overview of the study including implications and recommendations.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Introduction

School rampage shootings capture the nation's attention like no other type of school violence. Although this type of incident is rare and schools are safer than they have ever been, many communities are focused on preventing these shootings from happening locally (Langman, 2009a). By definition, school rampage shootings occur in communities with low crime rates, with the shooter being a current or former student who is looking to avenge previous grievances by targeting random victims (Newman et al., 2004; Rocque, 2012). All the media coverage, along with the randomization of victims, sends the message these types of shootings are happening more often than is accurate (Agger & Luke, 2008; Goode & Ben-Yehuda, 2009). The truth about school rampage shootings is the avenger is hyperfocused on carrying out the shootings with a specific, detailed plan (Twemlow, Fonagy, Sacco, & Vernberg, 2002).

The purpose of this study was to evaluate a counselor's ability to identify students who exhibit warning signs of school rampage shooters. Districts are addressing the problem of school rampage shooters by incorporating safety plans. While safety plans are important for schools to address, this study focused on identifying the student before a heinous act is committed. This study focused on the identification of school shooters by looking at four areas: family history, behavior traits, social dynamics, and school environment. School personnel need to look at the whole child and not just focus on one piece of information or one particular situation. The study was about counselors looking for warning signs in these four areas. The researcher selected counselors due to their

unique relationship with faculty and staff. Oftentimes, counselors are the first mental health person to address the issues students are facing (Bauman, 2008; Costin et al., 2002). Serving as the first line of defense in mental health, it is imperative school counselors have the proper training to identify students who may be exhibiting warning signs of school rampage shooter. With proper training, counselors can be a valuable resource for other faculty members to better serve these students and prevent these deadly occurrences in schools.

The following research questions were used to guide this study:

1. To what extent can secondary school counselors identify the key traits of a school rampage shooter?
2. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage shooters for counselors that graduated prior to 2009 and those that graduated after 2009?
3. To what extent do differences exist in secondary school counselors' abilities to identify students who exhibit the warning signs typical of school rampage shooters for counselors that have previous mental health experience or training versus those who do not?

The following were the secondary research questions:

1. To what extent are secondary school counselors trained to identify the behavioral traits typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?

2. To what extent are secondary school counselors trained to identify the family history signs that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
3. To what extent are secondary school counselors trained to identify the school environment dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?
4. To what extent are secondary school counselors trained to identify the social dynamics that are typical of school rampage shooters by looking at the differences between correctly identified traits and incorrectly identified traits?

Secondary school counselors were sent a survey to determine their ability to identify warning signs a student exhibits. School counselors that completed the closed-ended survey more readily identified the accurate warning signs for the given vignette in the areas of family history, behavioral traits, and school environment. Alternatively, school counselors who completed the open-ended survey more readily identified the correct warning signs in the area of social dynamics. The primary and secondary research questions were used to determine if year of certification and previous mental health experience would be main effects in the responses of the school counselors. There were no statistically significant differences when running the MANOVA for year of certification. The independent variables of mental health experience and type of survey showed a statistically significant difference. The following sections will highlight the findings for the primary research questions and provide implications for the education profession.

Research Question 1

The first research question addressed the school counselor's ability to identify the warning signs in a given vignette (see Appendices A & B). Overall, more than 90% of the 105 participants correctly identified student's actions of harming animals, giving a specific date, the school turning a blind eye to bullying, and the student's lack of connection to school as potential warning signs of a school rampage shooter. Of the 14 warning signs from the given vignette (see Appendices A & B), more than 60% of the 105 participants correctly identified 12 of the warning signs. The two warning signs less than 40% of the 105 participants correctly identified were Steven's interest in hunting and Steven's smaller build. Many participants may have felt the strong interest in hunting was not a stand-alone warning sign; however, paired with Steven's access to guns and love of violent video games, his strong interest in hunting was a potential warning sign. According to Leary et al. (2003), a strong interest in violence is a warning sign. Furthermore, participants did not readily recognize Steven's smaller build as a potential warning sign. Masculinity is one of the greatest common themes among school rampage shooters (Kimmel & Mahler, 2003). Specifically, previous rampage shooters were smaller in stature and deviated from the norm in appearance (Kimmel & Mahler, 2003; Salyers, 2008).

The two choices that 70% of the overall participants selected were Steven's lack of interest in school and grades and sitting alone at lunch, which were not a correct warning signs for the given vignette. Though Steven's grades were low and he had general lack of concern for his grades, research does not identify as warning signs for school violence though they could be risk factors for other behaviors. According to

Salyers (2008), educators need to look for a change in performance, particularly a decline in performance. Although educators should be aware of students who lack a connection in school, the fact that Steven sat alone was not a potential warning sign. The social rejection he felt from Elizabeth and Gabe was a bigger warning sign (Dwyer et al., 1998; Nims & Sandhu, 2007). When looking at the three independent variables of type of survey, year of certification, and previous mental health experience, only the type of survey showed statistically significant differences in responses.

This difference in the type of survey administered, closed-ended questions versus open-ended questions, was significant in that specific prompts likely aided in the identification of the key signs. The closed-ended survey participants were better at identifying the family history warning signs, behavior trait warning signs, and school environment warning signs. The open-ended survey participants were better at identifying the social dynamic warning signs. This was to be expected since educators tend to be better at identifying specific problems when presented with as much detailed information as possible. Langman (2012) urged all educators involved in a situation to assess each threat for its credibility. Counselors need to work alongside school resource officers and administrators when conducting a threat assessment of a particular student. The counselor needs to represent the student's current mental health state as part of the threat assessment.

Research Question 2

The second research question guided this study to determine if year of certification would be a main effect when identifying warning signs. The researcher expected those who received their degree 2009 or later (Subgroups C and D) to more

readily identify the warning signs in the vignette as compared to those who received the degree before 2009 (Subgroups A and B). The survey results did not show a statistically significant difference between the responses of those participants certified before 2009 or those certified 2009 or later. Overall, more than 50% of all participants were able to correctly identify all the school environment warning signs no matter the year of certification. The school environment is one particular area over which educators have some control, and school counselors seem to have a firm understanding of what is the norm and, more importantly, what is a red flag within the school environment. Most counselors were able to identify that lack of parent supervision should be a red flag for a student. This could result in a lack of connection between parent and child, which is a vital relationship in personality development (Dogra, 2008). As stated with Research Question 1, counselors were not readily able to identify Steven's smaller build and interest in hunting as potential warning signs.

Although participants certified before 2009 may not have been under the CACREP standards addressing crisis intervention, these participants still have the knowledge to readily identify certain warning signs. This could be the result of more years of experience or professional development that has leveled the playing field. It is important to note that participants are readily identifying that a student harming an animal, giving a specific date, and a school environment that ignores bullying are critical warning signs. Counselors realize that a tolerance for bullying coupled with leakage, foreshadowing information through verbal communication or writings, can make students reach breaking points where they feel they need to take matters into their own hands (Bushman et al., 2016; Hernandez & Seem, 2004; Furlong et al., 1997). Furthermore, the

counselors understand that harming animals is a serious, violent warning sign that shows the student is able to watch something die without remorse (Bernes & Bardick, 2007; Hermann & Finn, 2002; Nims & Sandhu, 2007).

Research Question 3

The third research question guided the study to determine if there was a statistically significant difference in responses of participants who had previous mental health experiences versus those who did not have previous mental health experience. Overall, there was no statistically significant difference in responses between the two groups in most categories. The one area that resulted in a difference was participants with previous mental health experience incorrectly identified parental drug use as a warning sign. According to Langman (2009a), parent drug use could be a potential warning sign when paired with sexual, physical, or mental abuse toward the child. In this vignette, it was not stated if Steven's mother abused him in any way. However, counselors who had previous mental health experience must have seen the parent drug use as a greater risk factor, possibly, due to their exposure to children who had been negatively affected by the drug use. Training may need to be provided for counselors on how to use follow-up questioning to better assess the family situation.

For the closed-ended survey, there was a statistically significant difference for one social dynamics response. Those without mental health experience more readily identified the new relationship between Gabe and Elizabeth as a potential warning sign. Previous school rampage shooters have a history of peer rejection with some experiencing a recent breakup with a girlfriend before the shooting occurred (Dwyer et al., 1998; Leary et al., 2003; McGee & DeBernado, 2003; Nims & Sandhu, 2007). Most

of the school counselors without mental health experience are teachers before entering the counseling field. Student interactions in the classroom, particularly the boyfriend/girlfriend dynamic, provides insight to how rejection can impact a student. Usually, counselors with mental health background do not have a classroom background. This can limit their viewpoint of student relationships within the school environment. As a result, they may not readily identify the rejection students feel from a breakup or peer rejection.

Overall Findings

The three independent variables addressed in the data analysis were type of survey, year of certification, and previous mental health experience. The results indicated that certification year did not have statically significant effect in the responses given. The independent variables that had a main effect was the type of survey the participants completed and previous mental health experience. Participants who completed the closed-ended survey were more accurate in identifying the warning signs for 3 of the 4 threat assessment areas: family history, behavioral warning signs, and school environment. The open-ended participants more accurately identified the social dynamic warning signs that occurred in the vignette. This study indicates that despite the year a counselor graduated or their mental health background, school counselors are well trained in this topic.

The study shows that counselors are trained in recognizing what the school environment should look like to be beneficial to student growth. This is the one area of the four threat assessment areas in which counselors have the most influence. Counselors recognize that a school should have an intolerance to bullying, students should be

connected in some way, and there should not be favoritism shown to one particular group of students. Furthermore, counselors are firm in their understanding that knowledge of behavioral traits such as a student harming an animal or the student leaking information about intent to shoot others need be taken seriously. For the family history warning signs, counselors were able to correctly identify that a parent should be well connected to their child, and the child should not be left at home for long periods of time on a regular basis.

In this study, there were seven null hypotheses. The researcher accepted the null hypothesis that year of certification would have no statistically significant difference in the identification of shooter warning signs between secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009. Also, the researcher accepted the null hypothesis that year of certification would have no statistically significant difference in the identification of shooter warning signs, as it pertains to the four threat assessment areas, between secondary school counselors who earned their degrees in school counseling before 2009 and those who earned them after 2009. Finally, the researcher rejected the null hypothesis that there was no statistically significant difference in the identification of shooter warning signs between secondary school counselors with previous mental health and experience and those without previous mental health experience.

Professional Implications

The purpose of this study was to evaluate a counselor's ability to identify students who exhibit warning signs of school rampage shooters. The researcher focused on school counselors due to their unique relationship with faculty and staff. Furthermore, counselors serve as a bridge between the school environment and the mental health

world. They are able to provide resources and strategies to support teachers and students. This study provides the following implications for counselors, teachers, and school administrators.

1. Counselors and school leaders would benefit from additional training that focuses on the key warning sign of the effects of masculinity. Specifically, educational professional need to key in on the social norms or expectations a particular school culture has for males. Each school's masculine social expectations will vary across the state and the country. Administrators and counselors needs to focus on what the unwritten male code is for that particular school. Findings from this study indicated counselors did not always recognize the student's smaller build as being an indicator. According to Kimmel and Mahler (2003), previous school rampage shooters were called homosexual as well as gay baited for looking different from their peers. Furthermore, Salyers' (2008) found that school rampage shooters were ridiculed for being smaller in stature. The findings from this study, along with the school rampage literature, indicate counselors are in need of more specific training on how to identify students who face ridicule and interventions to help these students in the school environment.
2. Findings from this study indicate that counselors are well-trained in their knowledge of a positive school climate. In this study, school counselors consistently identified the key warning signs of stopping bullying, favoritism to particular student groups, and a student's connection to school. Slayes (2008) found that school shooters often felt popular athletes were given

preferential treatment in the school setting. Furthermore, many of the shooters felt they were victims of bullying (McGee & DeBernardo, 2003). The transition from elementary to middle grades can be overwhelming to students due to the less personalization and larger class sizes which can lead to increase in negative student behaviors (Eccles & Midgley, 1989; Gutman & Eccles, 2007). To combat these potential warning signs, school counselors can lead school faculty in professional development of the components necessary for students to feel safe at school and thrive academically, socially, and emotionally.

3. A third implication for the education profession is the idea of conducting a thorough threat assessment. Findings in this study indicate that counselors were more readily able to identify key warning signs when presented with all the information. During a threat assessment, all the details including the student's specific language and current behavior need to be presented before decisions are made (Langman, 2012; O'Toole, 1999; Twemlow et al., 2002). One of the most critical components of the threat assessment is to look at the premeditation and planning the student engaged in prior to school officials being alerted (Borum, 2000; Cornell, 2010; O'Toole, 1999). Schools need to adopt specific procedures for gathering information during a threat assessment. The more specific the information the better the outcome.
4. Mental health is a key component of the threat assessment school personnel should consider when investigating a situation. According to researchers, a significant amount of school shooters had suicidal thoughts or attempted to

commit suicide before the shooting occurred (Nims & Sandhu, 2007; Vossekuil et al., 2002). The majority of school shootings end with the death of shooter (Rocque, 2012). Counselors should work alongside administrators and school resource officers to ensure the mental health of students is considered while threat assessments are being conducted. School districts need to utilize a team approach to address the whole child throughout the threat assessment process.

5. School counselors wear many hats in their daily role. The primary function of the school counselor has been academic support such as administering cognitive tests, scheduling, or testing coordination (Chandler et al., 2008; Cinotti, 2014; Nims & Sandhu; Riley & McDaniel, 2000). Through this study, the importance of the counselor providing support to students and professional development needs to become a top priority for leaders in the district. School leaders need to advocate for reallocation of current counselor duties such as test coordination or cognitive testing. Student social and emotional well-being needs to take up a majority of the counselor's time

Recommendation for Future Research

This study focused just on the identification of risk factors of school rampage shootings. One recommendation for future research would be to determine what techniques or strategies school counselors or administrators are equipped with to address students who show signs of potential violence. Furthermore, researchers could look at particular strategies or supports that have proven effective in addressing students who have thoughts of harming others. This study, along with future studies on effective

strategies, would lend themselves to examining the curriculum taught at current training programs for future school counselors. Also, researchers should examine the current practices of school districts to provide professional development on mental health issues.

One area of focus in this study was looking at the training of outside mental health and how it affects the counselor's ability to identify certain warning signs. Previous mental health experience can be vital in providing a knowledge base for school districts to utilize when addressing students who exhibit particular warning signs. These individuals are equipped with a level of expertise in providing supports to students that counselors without mental health experience may not have. Further research should be done to determine how experiences outside the school environment prepare a counselor to address mental health issues within the school setting. It is important to make note of the different cell sizes for the main effects in this study, which included type of survey, certification year, and mental health experience. The researcher recommends conducting a similar study with more participants and equal cell sizes to see if the level of significance changes.

One common theme among the counselors was their inability to correctly identify warning signs that fell in the masculinity category. Counselors were not readily able to identify the student's smaller build and strong interest in hunting as potential warning signs. Further research should be done to examine the effects of masculinity that exist within the school culture. In particular, this study could examine how male students feel when they are not as physically developed as their male counterparts in the academic setting. When addressing masculinity as it pertains to school rampage shooters,

researchers need to focus on the social norms or expectations placed on males as it pertains to looks and behavior.

Summary

Counselors serve as liaisons between the school system and the mental health world. In this study, it was confirmed that more appropriate and specific information provided in a given situation helps individuals more readily identify a person exhibiting the warning signs. However, these warning signs may not be enough to correctly identify every potential school rampage shooter among the student population. There is no perfect formula for identifying a school rampage shooter (Langman, 2012). The unfortunate reality is warning signs are missed and kids slip through the cracks of the educational system or there are students receiving mental health services who still choose to commit such a heinous acts. Though school rampage shootings are hard to pinpoint, this study did show counselors are trained to recognize warning signs potential school shooters may be exhibiting. The ultimate goal is student safety. The more training and strategies with which students, staff, and the community are equipped, the less likely school rampage shootings will be to occur. The greatest tool educators can have in their tool belt is awareness of the whole child in the home and school environment.

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APPENDIX A
SURVEY – CLOSED-ENDED

The purpose of this questionnaire is for you to provide some basic background information about yourself and your counseling experience. Please complete the following demographics questionnaire.

1. What is your gender?

2. In what year did you receive your counseling certification?

3. How many years of counseling experience do you have?

4. What grade levels are in your building?

5. Do you have a clinical mental health degree?
Yes or No
 - a. Do you have previous clinical mental health experience?
Yes or No

6. What is your community makeup?
Rural or urban or suburban

Directions: Below is a narrative of a school-aged individual. The narrative is divided into four sections: family history, student behavior, school environment, and social dynamics. Please read the narrative and answer the questions following the narrative. The questions are multiple-choice so please select all choices you feel apply to the question based on the narrative you read. Your responses should be based on family history, student behavior, school environment, and social dynamics warning signs a school shooter displays you notice from the provided vignette. There is one open-ended response question at the end. Please write in your response. An asterisk (*) indicates a correct response.

Key Definitions

School Rampage Shooter. School shooting committed by a current or former student with no particular victim, usually ends in the death of the shooter, mass shooting in a ceremonial fashion for the

shooter to gain fame or revenge for a perceived previous negative experience (Newman et al., 2004; Rocque, 2012).

Vignette. Short stories about sensitive information creation to place the respondent in a real-life situation to elicit responses about expected behavior (Schoenberg & Ravdal, 2000).

Family History

Steven's parents divorced when he was 5 years old and both parents have remarried. He has two older sisters that attend high school. The parenting plan states Steven's primary residency is with dad. Due to Steven's dad's work schedule, Steven experiences a lot of freedom after school. A teacher has reported mom lost custody due to drug use. In one narrative writing piece, Steven wrote about a time he and his dad went on a hunting trip. He included that he and his dad shoot guns often. Steven had two days of out-of-school suspension last year for stealing another student's phone. Steven's father did not support the administration's decision, as he felt it was too harsh. Dad reports Steven is just going through normal teenage behavior and it is just a phase.

Student Behavior

During free write sessions, Steven often talks about his love for video games such as "Thrill Kill" and "Gears of War." His dad stated Steven spends all evening playing video games after school. Also, Steven has taken on his dad's love for hunting. Steven often comments in his writing how much he loves spending time with his dad during hunts. Teachers have reported Steven to the counseling office because of his general lack of interest in classroom activities and lack of concern for his grades. Also, teachers state that Steven often wears all black clothing and carries a large bag to school. Two weeks ago, two female students reported to the office that Steven was talking about killing his pet cat. Furthermore, the girls said he was talking to his friends about making sure they are not at school on December 11.

School Environment

Steven is an eighth grader at Oak Ridge Middle School. Steven is has a 1.9 GPA with a 90% attendance rate. The school has an 85% graduation rate. The school received a 65% pass rate on its latest state assessment scores and has a ranking of 225 out of 450 schools. The school has 550 students with two administrators. The principal has 27 years of experience while the assistant principal has 28 years of experience. They are former teachers in the district and are known for being laid-back in students affairs, turning a blind eye to fights and bullying issues. Oak Ridge celebrates it athletics, and many feel the athletes get precedence over other students. As part of a district improvement plan, the district office recently conducted a district climate survey that was submitted to both parents and students. Each building received their scores and the most concerning area for the middle school was the lack of connection students feel to the school. For the parents, the survey revealed they do not feel students are being pushed academically.

Social Dynamics

Teachers report to the counselors that Steven is resistant to working on group projects in most cases; however, Steven does seem compliant with two students in his class, Henry and Gabe. Steven seems to struggle the most to interact in P.E. class; Coach Smith reports that Steven does not participate in any team sport activity. He prefers to receive an F rather than participate in physical activities. Although, Coach Smith does add that there are a lot of athletes in that particular P.E. section and Steven, with his smaller build, may feel intimidated to play. At the beginning of the school year, Steven was seen in the hallway and sitting at lunch with a female student named Elizabeth. The last couple of weeks, however, teachers have noticed Elizabeth and Gabe are often together and sitting by each other in classes. Teachers have noticed Steven sitting by himself for lunch within the last week. Gabe, Steven, and Henry are all members of the Robotics Club and the Elite Gamers Club.

Questions

1. Select all family history warning signs of a school rampage shooter the student displayed in the written vignette. Select all that apply.
 - a) Lack of parental supervision*
 - b) Parental divorce
 - c) Access to guns*
 - d) Parent use of drugs
 - e) Parent not supporting administration's disciplinary decision*

2. Select all behavioral warning signs of a school rampage shooter the student displayed in the written vignette. Select all that apply.
 - a) Lack of interest in school and grades
 - b) Interest in violent video games *
 - c) Interest in hunting*
 - d) Black clothing and large bag
 - e) Harming animals*
 - f) Specific date given to friends*

3. Select all school environmental warning signs of school rampage shooter the student displayed in the written vignette. Select all that apply.
 - a) School turning blind eye to bullying*
 - b) Student GPA of 1.9
 - c) School earning 65% on state assessments
 - d) Lack of connection of students to school*
 - e) Athletes get precedence at school*

4. Select all social dynamics warning signs of a school rampage shooter the student displayed in the written vignette. Select all that apply.

- a) Resistance to working in groups*
 - b) Sitting by himself at lunch
 - c) Robotic and video games club
 - d) Smaller build*
 - e) Feels intimidated*
 - f) Steven's female friend sitting with his friend Gabe.*
5. Is there other information that would be vital to assessing the student for potential to be a school rampage shooter?

APPENDIX B
SURVEY – OPEN-ENDED

The purpose of this questionnaire is for you to provide some basic background information about yourself and your counseling experience. Please complete the following demographics questionnaire.

1. What is your gender?

2. In what year did you receive your counseling certification?

3. How many years of counseling experience do you have?

4. What grade levels are in your building?

5. Do you have a clinical mental health degree?
Yes or No
 - a. Do you have previous clinical mental health experience?
Yes or No

6. What is your community makeup?
Rural or urban or suburban

Directions: Below is a narrative of a school-aged individual. The narrative is divided into four sections: family history, student behavior, school environment, and social dynamics. Please read the narrative and answer the questions following the narrative. The questions are open-ended so please write in your responses based on the narrative you read. Your responses should be based on family history, student behavior, school environment, and social dynamics warning signs you notice from the provided vignette.

Key Definitions

School Rampage Shooter. School shooting committed by a current or former student with no particular victim, usually ends in the death of the shooter, mass shooting in a ceremonial fashion for the shooter to gain fame or revenge for a perceived previous negative experience (Newman et al., 2004; Rocque, 2012).

Vignette. Short stories about sensitive information creation to place the respondent in a real-life situation to elicit responses about expected behavior (Schoenberg & Ravdal, 2000).

Family History

Steven's parents divorced when he was 5 years old and both parents have remarried. He has two older sisters that attend high school. The parenting plan states Steven's primary residency is with dad. Due to Steven's dad's work schedule, Steven experiences a lot of freedom after school. A teacher has reported mom lost custody due to drug use. In one narrative writing piece, Steven wrote about a time he and his dad went on a hunting trip. He included that he and his dad shoot guns often. Steven had two days of out-of-school suspension last year for stealing another student's phone. Steven's father did not support the administration's decision, as he felt it was too harsh. Dad reports Steven is just going through normal teenage behavior and it is just a phase.

Student Behavior

During free write sessions, Steven often talks about his love for video games such as "Thrill Kill" and "Gears of War." His dad stated Steven spends all evening playing video games after school. Also, Steven has taken on his dad's love for hunting. Steven often comments in his writing how much he loves spending time with his dad during hunts. Teachers have reported Steven to the counseling office because of his general lack of interest in classroom activities and lack of concern for his grades. Also, teachers state that Steven often wears all black clothing and carries a large bag to school. Two weeks ago, two female students reported to the office that Steven was talking about killing his pet cat. Furthermore, the girls said he was talking to his friends about making sure they are not at school on December 11.

School Environment

Steven is an eighth grader at Oak Ridge Middle School. Steven is has a 1.9 GPA with a 90% attendance rate. The school has an 85% graduation rate. The school received a 65% pass rate on its latest state assessment scores and has a ranking of 225 out of 450 schools. The school has 550 students with two administrators. The principal has 27 years of experience while the assistant principal has 28 years of experience. They are former teachers in the district and are known for being laid-back in students affairs, turning a blind eye to fights and bullying issues. Oak Ridge celebrates it athletics, and many feel the athletes get precedence over other students. As part of a district improvement plan, the district office recently conducted a district climate survey that was submitted to both parents and students. Each building received their scores and the most concerning area for the middle school was the lack of connection students feel to the school. For the parents, the survey revealed they do not feel students are being pushed academically.

Social Dynamics

Teachers report to the counselors that Steven is resistant to working on group projects in most cases; however, Steven does seem compliant with two students in his class, Henry and Gabe. Steven seems to struggle the most to interact in P.E. class; Coach Smith reports that Steven does not participate in any team sport activity. He prefers to

receive an F rather than participate in physical activities. Although, Coach Smith does add that there are a lot of athletes in that particular P.E. section and Steven, with his smaller build, may feel intimidated to play. At the beginning of the school year, Steven was seen in the hallway and sitting at lunch with a female student named Elizabeth. The last couple of weeks, however, teachers have noticed Elizabeth and Gabe are often together and sitting by each other in classes. Teachers have noticed Steven sitting by himself for lunch within the last week. Gabe, Steven, and Henry are all members of the Robotics Club and the Elite Gamers Club.

Questions

1. List all family history warning signs of a potential school rampage shooter the student displayed in the written vignette.
2. List all student behavioral warning signs of a potential school rampage shooter the student displayed in the written vignette.
3. List all school environmental warning signs of a potential school rampage shooter the student displayed in the written vignette.
4. List all social dynamics warning signs of a potential school rampage shooter the student displayed in the written vignette.
5. Is there other information that would be vital to assessing the student for potential to be a school rampage shooter?

APPENDIX C

SURVEY INSTRUMENT TO EXPERTS

Directions:

Please rate the following items regarding how well they do (or do not) tap the established objectives. The first portion of this survey is the vignette that will be given to all participants. Please read the vignette then complete the rating scale for the questions assessing the vignette. The ratings are:

1: item clearly taps objective

0: unsure/unclear

-1: item clearly does not tap objective

Key Definitions:

School Rampage Shooter. School shooting committed by a current or former student with no particular victim, usually ends in the death of the shooter, mass shooting in a ceremonial fashion for the shooter to gain fame or revenge for a perceived previous negative experience (Newman et al., 2004; Rocque, 2012).

Vignette. Short stories about sensitive information creation to place the respondent in a real-life situation to elicit responses about expected behavior (Schoenberg & Ravdal, 2000).

Family History

Steven's parents divorced when he was 5 years old and both parents have remarried. He has two older sisters that attend high school. The parenting plan states Steven's primary residency is with dad. Due to Steven's dad's work schedule, Steven experiences a lot of freedom after school. A teacher has reported mom lost custody due to drug use. In one narrative writing piece, Steven wrote about a time he and his dad went on a hunting trip. He included that he and his dad shoot guns often. Steven had two days of out-of-school suspension last year for stealing another student's phone. Steven's father did not support the administration's decision, as he felt it was too harsh. Dad reports Steven is just going through normal teenage behavior and it is just a phase.

Student Behavior

During free write sessions, Steven often talks about his love for video games such as "Thrill Kill" and "Gears of War." His dad stated Steven spends all evening playing video games after school. Also, Steven has taken on his dad's love for hunting. Steven often comments in his writing how much he loves spending time with his dad during hunts. Teachers have reported Steven to the counseling office because of his general lack of interest in classroom activities and lack of concern for his grades. Also, teachers state that Steven often wears all black clothing and carries a large bag to school. Two weeks ago, two female students reported to the office that Steven was talking about killing his pet cat. Furthermore, the girls said he was talking to his friends about making sure they are not at school on December 11.

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Social Dynamics

Teachers report to the counselors that Steven is resistant to working on group projects in most cases; however, Steven does seem compliant with two students in his class, Henry and Gabe. Steven seems to struggle the most to interact in P.E. class; Coach Smith reports that Steven does not participate in any team sport activity. He prefers to receive an F rather than participate in physical activities. Although, Coach Smith does add that there are a lot of athletes in that particular P.E. section and Steven, with his smaller build, may feel intimidated to play. At the beginning of the school year, Steven was seen in the hallway and sitting at lunch with a female student named Elizabeth. The last couple of weeks, however, teachers have noticed Elizabeth and Gabe are often together and sitting by each other in classes. Teachers have noticed Steven sitting by himself for lunch within the last week. Gabe, Steven, and Henry are all members of the Robotics Club and the Elite Gamers Club.

Open-Ended Questions

Objective: To identify knowledge of warning signs in family history.

1. List all family history warning signs of a potential school rampage shooter the student displayed in the written vignette.

_____ **1** _____ **0** _____ **-1**

Objective: To identify knowledge of warning signs in student behaviors.

2. List all student behavioral warning signs of a potential school rampage shooter the student displayed in the written vignette.

_____ **1** _____ **0** _____ **-1**

Objective: To identify knowledge of warning signs in school environment setting.

3. List all school environmental warning signs of a potential school rampage shooter the student displayed in the written vignette.

_____ **1** _____ **0** _____ **-1**

Objective: To identify knowledge of warning signs in student social interactions.

4. List all social dynamics warning signs of a potential school rampage shooter the student displayed in the written vignette.

_____ **1** _____ **0** _____ **-1**

Objective: To gain an understanding of any additional training or information.

5. Is there other information that would be vital to assessing the student for potential to be a school rampage shooter?

_____ **1** _____ **0** _____ **-1**

Selected-Response Questions

Objective: To identify knowledge of warning signs in family history.

1. Select all family history warning signs of a school rampage shooter the student displayed in the written vignette. Select all that apply.
- a) Lack of parental supervision
 - b) Parental divorce
 - c) Access to guns
 - d) Parent use of drugs
 - e) Parent not supporting administration's disciplinary decision

_____ **1** _____ **0** _____ **-1**

Objective: To identify knowledge of warning signs in student behaviors.

2. Select all behavioral warning signs of a school rampage shooter the student displayed in the written vignette. Select all that apply.
- a) Lack of interest in school and grades
 - b) Interest in violent video games
 - c) Interest in hunting
 - d) Black clothing and large bag
 - e) Harming animals
 - f) Specific date given to friends

_____ **1** _____ **0** _____ **-1**

Objective: To identify knowledge of warning signs in school environment setting.

3. Select all school environmental warning signs of school rampage shooter the student displayed in the written vignette. Select all that apply.
- a) School turning blind eye to bullying
 - b) Student GPA of 1.9
 - c) School earning 65% on state assessments
 - d) Lack of connection of students to school
 - e) Athletes get precedence at school

_____ **1** _____ **0** _____ **-1**

Objective: To identify knowledge of warning signs in student social interactions.

4. Select all social dynamics warning signs of a school rampage shooter the student displayed in the written vignette. Select all that apply.
- a) Resistance to working in groups
 - b) Sitting by himself at lunch
 - c) Robotic and video games club
 - d) Smaller build
 - e) Feels intimidated
 - f) Steven's female friend sitting with his friend Gabe.

_____ **1** _____ **0** _____ **-1**

APPENDIX D

CONSENT FORM

Counselor Consent to Conduct Research

Counselor Participant:

By clicking, "I Agree," you are giving consent to participate in this research project and understand the following:

Project Background

This project involves gathering data through QuestionPro online survey. The purpose of this study is an evaluation of a counselor's ability to identify students who exhibit warning signs of school rampage shooters. The data will be collected for analysis and may be published. Participants must be at least 18 years of age to participate and must currently hold a title of school counselor or psychologist, which encompasses 6th grade through 12th grade.

Purpose

The purpose of this study is an evaluation of a counselor's ability to identify students who exhibit warning signs of school rampage shooters. The researcher will determine the counselor's ability to identify warning signs of a school rampage shooter in the areas of behavioral traits, family history, school environment, and social settings. Specifically, the researcher is looking the year 2009 as the year of analysis. The researcher used 2009 due to the Council for Accreditation of Counseling and Related Educational Programs changing the standards to include trauma and crisis. In addition, the researcher will analyze whether a mental health background will impact the ability of a school counselor to accurately identify the warning signs.

Voluntary

The survey is entirely voluntary. You may refuse to answer any question or choose to withdraw from the study at any time, without penalty or loss of benefits to which you are otherwise entitled.

Procedures

Counselor participants will receive an email that includes the demographic survey. The counselor will be asked to complete a demographic survey. Upon completion of the survey, the researcher will place participants in two study groups. You will receive a second questionnaire containing a vignette of a school shooter and be asked to complete the questions following the vignette. The questions will either be open-ended or closed-ended. The survey will be sent to all counselors in grades 6-12.

This study seeks to determine if the changes in the 2009 CACREP have an impact on the counselor's ability to identify students who exhibit warning signs of school rampage shooters. Furthermore, the researcher will determine if a mental health background has an impact on the counselor's ability to identify students who exhibit warning signs of school

rampage shooters. Suggestions for further researcher include extending the survey to teachers and administrators.

Duration of Involvement

Participation in the study should be limited to the time to complete the survey. Participants may request to receive a copy of the findings from the research when complete.

Confidentiality

Your confidentiality will be maintained in that a participant's name will not appear on the survey or in the published study itself. Counselors who participate will have their email automatically collected through the secure survey program, QuestionPro, when they agree to participate in the study. QuestionPro is a secure, password-protected system that will keep the data for this study safe and confidential. The data will only be reported in a cumulative form. **Anonymity for counselors cannot be guaranteed.** Confidentiality for all participants is ensured.

Risks

This research project does not pose any risks greater than those encountered in everyday life.

Benefits

Your participation in this research project will enhance the information base for counselor training and education. Counselors will learn about the heightened situation that arises when assessing students that present student behavioral signs. Additional benefits will include insight into professional development for current school counselors. Also, secondary institutions will be able to reevaluate the training programs for future counselors.

Thank you for your assistance in providing the information regarding a school counselor's training and the impact on the ability of the counselor to identify a school rampage shooter. Your time and effort are greatly appreciated. If you have any questions regarding this study, please contact me at (417)840-3565 or by email s485752@sbuniv.edu. You may also contact my faculty advisor, Dr. Kevin Schriver, at (417)328-1725, or kschriver@sbuniv.edu.

The SBU Research Review Board has reviewed this study. If you have any questions regarding our rights as a participant in research, please feel free to contact the Research Review Board Chair, Martaun Stockstill at (417)328-2089, or RRB@sbuniv.edu. Thank you in advance for your assistance with this research project.

Sincerely,

Skyler Brown, Doctoral Candidate
Southwest Baptist University