Understanding Childhood Maltreatment: Literature Review and Practical Applications for Educators

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UNDERSTANDING CHILDHOOD MALTREATMENT: LITERATURE REVIEW
AND PRACTICAL APPLICATIONS FOR EDUCATORS

by

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A THESIS

Presented to the Faculty of
The Graduate College at the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Master of Arts

Major: Special Education

Under the Supervision of Professor John W. Maag

Lincoln, Nebraska

July 2015
UNDERSTANDING CHILDHOOD MALTREATMENT: LITERATURE REVIEW AND PRACTICAL APPLICATIONS FOR EDUCATORS

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University of Nebraska, 2015

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The purpose of this thesis is to conduct a critical and descriptive review of the research related to children who experience trauma due to maltreatment—whether because of physical, sexual, emotional, or psychological abuse and neglect—their effects on children, and the potential impact in school and how educational personnel can support the needs of these students. An overview of child maltreatment and review of the literature related to children who have experienced maltreatment was provided including: (a) type of maltreatment, (b) prevalence of maltreatment, (c) effects of maltreatment, (d) treatment approaches, and (f) relevance for educators. The methods and results for obtaining and analyzing articles were outlined for this research study and existing appropriate and applicable strategies were modified and organized for educational personnel to use in a variety of school settings.

Keywords: child maltreatment, school personnel
To my husband, Greg Wright and my parents,

Cassandra McMahan and the late J. David McMahan
ACKNOWLEDGEMENTS

I wish to thank Dr. John W. Maag, my graduate advisor and chair of my committee, for his patience, guidance and support throughout the process of writing this thesis. I sincerely appreciate the time spent and the learning opportunities he provided. He continually challenged me to be a better writer and use my writing to help other educators. I would also like to thank the members of my committee, Dr. Suzanne Kemp and Dr. Reece L. Peterson, for their contributions and input towards the completion of this thesis.

Additionally, I want to thank my family. Their continued support throughout this journey has been tremendous. I would not have been able to accomplish this without you and your encouragement throughout this entire process. For that, I am forever grateful. Last, I would like to thank Kim Marxhausen, my first grade teacher who is now a mentor, for her assistance, inspiration, and motivation to accomplish this goal.
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CHAPTER 1
INTRODUCTION

Millions of children experience trauma each year and over the past 20 there has been growing attention in regards to this major issue affecting so many children (De Young, Kenardy, & Cobham, 2011). A variety of factors may result in children experiencing trauma and its related effects. Specific forms of maltreatment such as physical, emotional, and sexual abuse and neglect can result in children experiencing trauma. Natural disasters such as fires, earthquakes, and tornadoes can also result in trauma as well as children experiencing the effects of war and community or domestic violence (Cohen, Berliner & Mannarino, 2010; Courtois, 2004).

A common diagnosis as a result of trauma is Post Traumatic Stress Disorder (PTSD). Bernardon and Pernice-Duca (2012) indicated that PTSD may develop from exposure to traumatic events that involved actual or threatened death, serious injury, or threat to self or others’ physical integrity and that symptoms must be present for more than one month. They also noted that these symptoms include re-experiencing the trauma, avoidance and numbing of general responsiveness and increased arousal. Grasso et al. (2009) believed that PTSD is under diagnosed in maltreated children, especially when there is a lack of complete trauma history because the current criteria, according to the Diagnostic and Statistical Manual Fourth Edition, Text Revision (DSM-IV-TR), lack appropriate developmental modifications to the diagnosis. Nevertheless, children still experience the disabling symptoms that warrant treatment (Carrion et al., 2002). Many professionals believe accurate diagnostic criteria for children will lead to improved assessment information, developmentally appropriate interventions, better informed
teams working with these children and improved mental health policies (Pynoos et al., 2009). Therefore, the diagnosis of PTSD is not as commonly used with children and data related to PTSD and children are limited.

Encouragingly, during the last 20 years there has been a decline in the number of child maltreatment victims. This decline may be attributed to a focus on direct prevention, economic improvements, more aggressive criminal justice efforts, the use of psychiatric medication and generational changes (Jones, Finkelhor, & Halter, 2006). Unfortunately, with the decline of maltreatment victims, there has been a steady increase in the number of fatalities due to maltreatment (U.S. Health and Human Services, 1995, 2011).

Trauma manifests itself in people in different ways depending on the severity, duration, age, and the treatments received. However, researchers suggest that younger children are especially vulnerable to the effects of stress early in life caused by abuse and neglect due to their limited ability to cope (Turner et al., 2012; De Young et al., 2011). Therefore, this thesis focuses specifically on trauma, as a result of maltreatment, including physical, emotional, and sexual abuse and neglect. The remainder of this chapter is broken down into two areas. First, an overview of child maltreatment will be covered including the types of maltreatment experienced by children, its prevalence, effects, and treatment options. Second, the educational impact maltreatment has on children will be described as well as areas educators may address for helping these students succeed in schools. The chapter ends with the purpose and research questions of this thesis.
Overview of Maltreatment Experienced by Children

Given the breadth of factors that can lead to childhood trauma and its effects, the focus of this thesis will be on child maltreatment, specifically abuse and neglect. It is imperative to provide an in-depth examination of this specific type of trauma due to the considerable number of children affected by it each year. In this section, the types of maltreatment experienced by children will be described along with its prevalence, effects, and treatment approaches.

Types of Maltreatment

Sneddon (2003) provided definitions and discussed the characteristics of sexual abuse, emotional abuse, physical abuse and neglect. Sexual abuse involves adults, adolescents or children engaging in sexual activities that children may not understand, are not able to give informed consent and can occur on a contact or non-contact basis. Emotional abuse consists of behaviors such as belittling, terrorizing and isolating children from others, rejection and inappropriate socialization. Physical abuse occurs when physical harm or injury is inflicted on children and/or purposely failing to prevent them from physical injury. Neglect occurs when an adult fails to protect a child from any type of danger or persistent failure to care for him or her. It could involve insufficient attention and emotional availability to the child and a lack of stimulation, food, clothing, shelter, hygiene, nutrition, supervision, medical care or education that could result in harm to the child.
Prevalence of Maltreatment

According to the United States Health and Human Services Child Maltreatment Report (2011), multiple statistics were given regarding national and state prevalences for the various types of childhood maltreatment (neglect, physical abuse, psychological maltreatment/emotional abuse, sexual abuse, medical neglect, neglect and other types of maltreatment that do not match the previously listed categories). In this report 3.4 million abuse and/or neglect referrals were made on 6.2 million children. These numbers indicate that some referrals had multiple children associated with them. Although the number of unique victims has dropped slightly since 2007, abuse and neglect is still a problem and numerous children are being victimized annually. Included in this report were statistics related to child fatalities and perpetrators. Specifically, as a result of child abuse and neglect, 1,570 child fatalities were reported. A majority of deaths were in children under the age of four years.

Effects of Maltreatment

All forms of maltreatment have deleterious effects on children’s health and development (Stubenhort, Cohen, & Trybalski, 2010; Turner et al., 2012). Cohen, Perel, DeBellis, Friedman, and Putnam (2002) described a myriad of physical problems associated with PTSD, which can result from maltreatment. These include the effects of a child’s stress adaptation systems being overwhelmed and having a suppressed immune system. Cohen, Mannarino, Murray and Igelman (2006) stated that all forms of trauma might result in significant and long-lasting emotional and behavioral difficulties for children. Posttraumatic stress disorder, as a result of abuse or trauma, places children at
risk for other psychiatric and medical conditions and can alter their normal
developmental processes (Cohen et al., 2010).

Maltreatment can cause children to develop insecure attachment relationships,
disturbances in their development of self, ineffective peer relationships, fear of their
caregivers and other adults, distortions in their mental representations of things,
aggressive solitary and peer play and the incapacity to manage stress (Stubenhort et al.,
2010). It can also lead to disorganized attachments, the compulsive need to control all
aspects of the environment, distrust in caregivers as a source of safety, need to control
their caregivers in order to be safe, avoidant and anxious vigilance, intrusive memories of
the maltreatment, impaired social judgment, behavior, and affect, and assuming negative
motives of caregivers (Hughes, 2004).

Treatments

Multiple treatment approaches have been used to address the many detrimental
effects of various types of maltreatment and the trauma it causes and to help children
function socially, emotionally, academically and physically. Cognitive treatments aim to
modify dysfunctional thoughts, feelings and behaviors associated with trauma (Cohen et
al., 2010; Stubenhort et al., 2007). Family oriented treatments, such as Non-Directive
Supportive Therapy (NST), target the relationship between the parent and child, working
on communication and bonding (Cohen, Mannarino, & Knudsen, 2005). Children who
have experienced trauma struggle with social relationships and appropriate peer
interactions. Therefore, social interventions, such as play therapy and therapeutic
preschools have been designed to address these social needs (Gil, 1991; Stubenhort et al.,
2007). Finally, many psychiatrists use a psychopharmacological approach, prescribing a
variety of different medications to treat the effects and symptoms of trauma and PTSD (Huemer, Erhart, & Steiner, 2010).

**Educational Impact and Role of School Personnel**

According to Frederick and Goddard (2010), children who have been abused show significant difficulties in the school environment. Abused children struggle with cognitive tasks, display behavior problems, and are at a higher risk for school failure. Specific characteristics that children suffering from maltreatment may display in school include being less engaged academically, having greater social skill problems, a negative view of themselves, difficulties in self-regulation, and showing less resiliency than their non-abused peers. These problems can persist and worsen because school personnel may not be aware of any precipitating problems, such as maltreatment. Even when teachers are aware that a particular student has experienced maltreatment, they often do not know how to address it therapeutically within an educational context. Children who enter school with good internal and external resources begin positively, are able to interact with peers appropriately, and negotiate through different developmental tasks being reinforced by their own successes. Conversely, children who have been maltreated enter school with limited resources and, as such, experience learning and social difficulties, including behavior problems, risk of peer rejection, and disengagement in school. In this section the impact of Maslow’s hierarchy of needs, educators obtaining accurate and relevant information about maltreatment, school and mental health collaboration, and ways schools can mitigate the effects of maltreatment are presented.
Impact of Maslow’s Hierarchy of Needs

The cognitive, emotional, and psychological resources children typically have when they begin school are related to moving successfully through Maslow’s hierarchy of needs. The hierarchy involves different levels of needs that children have and how each level must be in place before the next level of need can be met: (a) physiological needs (hunger, food, sleep), (b) safety (shelter, removal from danger), (c) belonging (love, affection, being part of a group), (d) esteem (self-esteem and esteem from others), and (e) self-actualization (achievement and reaching individual potential). These needs are all compromised in children who have been maltreated.

Frederick and Goddard (2010) discussed the importance of school personnel having an understanding how trauma, as a result of maltreatment, impacts the passage through Maslow’s hierarchy and how it can negatively affect a child at school. According to Maslow, children’s basic needs, a sense of safety and belonging, and self-esteem must be established before they can achieve and reach their academic potential. Knowledge of Maslow’s levels helps educators understand that children who have experienced abuse or neglect struggle in school because their basic needs have not been met. Parish and Philip (1982) demonstrated that teachers who are familiar with Maslow’s hierarchy are more adept at fulfilling students’ needs which, in turn, positively impacted the students’ self-concepts, and ultimately their academic success. According to Prince and Howard (2002), there are numerous factors—including abuse and neglect—that are associated with a child’s care, well-being, and academic achievement.

Harper, Harper, and Stills (2003) explained that counselors, teachers, and other school personnel should be able recognize if a child has any unmet needs and how those
unmet needs can manifest through problems, behaviors, or visible conditions. Depending on the child or situation, unmet needs would present differently with each child. For example, a child may state that he or she is hungry or that his or her family is not able to eat meals regularly. A teacher may notice that a child is lacking proper hygiene practices or does not wear clothes that are clean or fit properly. A student may also share that their parents are gone, leaving her home alone, refusing to help them with her homework, or are saying unkind things to her. Sudden or dramatic behavioral changes would be a warning sign of possible maltreatment, whether it be abuse or neglect, for teachers to be aware of and note.

When children’s basic needs are not met, their ability to learn and acquire an education is compromised. Therefore, when teachers are aware of Maslow’s hierarchy of needs and how one level affects the next level, they would be able to do an informal assessment of their students and their needs (Parish, & Philip, 1982). For example, educational personnel can observe environmental conditions such as signs of poor nutrition or hygiene, physical or emotional indicators of abuse or neglect, evidence of rejection and isolation, or through consultation and communication with other adults who have knowledge about a child and his or her history (Harper et al., 2003). Cage and Salus (2010) described the indicators of abuse and neglect. These indicators include, but are not limited to, withdrawal from usual activities, changes in behavior or school performance, loss of self-confidence, reluctance to leave school, attempting to run away or commit suicide, unexplained injuries or injuries that do not match the child’s explanation, inappropriate sexual behavior, poor growth or hygiene, hiding food, stealing, delayed or inappropriate emotional development, psychosomatic complaints, poor school
attendance, or emotional swings that do not match the context or situation. These indicators are warning signs for educators to be aware of, although none of them are a guarantee that abuse or neglect has occurred. Evidence of rejection and isolation could be evident through sudden changes in a child’s peer group, a lack of peer group, social withdrawal or withdrawal from usual or preferred activities.

Obtaining Relevant Information and Schools’ Responsibility

Grasso et al. (2009) pointed out the importance of educators having knowledge of a child’s complete trauma history. In cases of a known history of abuse or neglect, educational personnel can contact current or past members of the child’s team, access the student’s confidential file, or communicate with other adults—after obtaining permission—that know the child, such as a caseworker, therapist, school social worker, or any other adult with knowledge of the child. If any member of the educational staff had concerns about academic or behavioral performance, they may contact other adults to communicate, collaborate, and problem solve. Collaborative meetings can be a successful way to share information, as well as brainstorming ways to support the child.

This appraisal is critical because information on what levels of Maslow’s needs have and have not been met are essential for a student to be ready to perform and achieve academic success. It is important to remember that there are a multitude of situations where past or current abuse and neglect is not known and there is little educators can do except to follow appropriate district and state guidelines for reporting any type of suspected abuse to ensure that both ethical and legal obligations are met to maintain the child’s safety. Therefore, the focus of this thesis concentrates on students where there is already a known history of maltreatment and what type of support educators can provide,
especially within the context of Maslow’s hierarchy and theory of needs, and how it relates to the school environment.

**School and Mental Health Collaboration**

As a result of the negative effects of maltreatment and the impact these effects have on a child’s academic and social performance in school, it is imperative for educational personnel to take advantage of resources available to them to meet the needs of the child. These resources may include other personnel within the school such as a social worker, school psychologist, behavior specialist, or those available outside the school setting including therapists, psychologists, and other members of a community treatment team. In order to collaborate with outside mental health care providers, school personnel must have knowledge of their involvement with the child and have parent or guardian permission.

Unfortunately, even with potential resources available to help children, many do not receive the behavioral, social, emotional, or mental health supports within schools to mitigate effects of maltreatment, and promote effective functioning in the school environment (Browne, Cashin, & Graham, 2012). Duchnowski and Kutash (2011) found that there needs to be better integration of the education and mental health systems in order to support children in the school setting. Although their findings were specific to students with emotional disturbances, they pointed out the lack of mental health supports in schools and the lack of collaboration between mental health and school systems when working to support students who display behavioral and emotional challenges from maltreatment. This collaboration and communication has the potential to increase the capacity for school based mental health services, specifically for students with emotional
disturbances. School personnel could collaborate with other mental health providers in a variety of ways, including, but not limited to, phone calls or meetings to discuss a student’s needs, current behavioral and social patterns, academic progress, and ideas or plans for providing support to the student to increase academic and behavioral progress. Adelman and Taylor (2012) affirmed that schools need to address the psychosocial, mental, and physical health concerns to enable a child’s school performance and well-being.

Addressing these student concerns involves a team approach by educational personnel and gaining additional strategies to support students who have experienced maltreatment. It includes communication and collaboration between parents or guardians, any members trained in addressing mental health concerns, the school nurse, teachers, and administrators. By using a team approach, the diversity of concerns may be addressed and team members can learn from each other about how to best meet the students’ needs. For example, a school social worker or school psychologist may provide information related to psychosocial and mental health concerns, the school nurse may provide ideas to address any health concerns related to the maltreatment, or teachers may share things they have tried in the classroom, but not necessarily related to strategies for supporting victims of maltreatment. Ultimately, the goal is to learn new ideas, gather information from other professionals, and create a plan to support a student’s needs.

**Schools and Mitigating the Effects of Maltreatment**

According to Cohen et al. (2002), it is critical for a child’s development and mental health to focus not only on trauma prevention but also on early identification and treatment—it is the latter that this thesis focuses on because schools play a pivotal role.
Therefore, education personnel need strategies to help students, when there is a known history of maltreatment, to lessen the negative educational impact of such maltreatment. For example, teachers could increase structure and routines in their classroom to provide children who have experienced maltreatment with a feeling of safety and predictability in the school setting. These effects of known trauma create barriers to student learning, including mental health and behavioral concerns and by addressing these barriers, schools can increase overall student learning and school safety (Adelman & Taylor, 2012).

Schools have the opportunity to intervene positively, providing children with the support they need. School psychologists have been the pivotal person in implementing interventions for students who have experienced maltreatment or have been diagnosed with PTSD (Cook-Cottone, 2004). It is important for school personnel not to miss the opportunity for intervention because of the critical number of children affected by maltreatment. However, it is apparent that educators need strategies and school-based interventions, which are developmentally appropriate, to provide academic and behavioral supports for these students. (Cicchetti, Toth, & Hennessey, 1993; Cicchetti & Toth, 1995)

**Purpose and Research Questions**

The purpose of this thesis is to conduct a critical and descriptive review of the research related to children who experience trauma due to maltreatment—whether because of physical, sexual, emotional, or psychological abuse and neglect—their effects on children, and the potential impact in school and how educational personnel can support the needs of these students. Children experience other types of trauma, but
because of the large number of children affected specifically by maltreatment, trauma from natural disasters (e.g. earthquakes, tornados) and war were excluded.

The information gained through the research on the effects of trauma and maltreatment will be reviewed descriptively and analyzed. From this review, existing appropriate and applicable strategies will be modified and organized for educational personnel to use in a variety of school settings. It is imperative to empower educational personnel with strategies to assist them in supporting students who have been victims of maltreatment. The ultimate goal is to implement strategies, with students who have a known history of maltreatment, to increase their social, behavioral, and academic functioning. The strategies presented for educational personnel will be obtained from the critical review of the extant research, which is the focus of this thesis.

There are four research questions this thesis is designed to answer: (1) Is there sufficient data examining child maltreatment? (2) What areas of child maltreatment have studies addressed? (3) What areas of child maltreatment require additional research? (4) Does the research on child maltreatment provide guidance on implementing strategies in schools that may provide positive outcomes for child maltreatment victims? It was hypothesized that there is sufficient data regarding treatments and supports available for ameliorating the effects of maltreatment in clinical settings. However, it was also hypothesized that the data are insufficient regarding interventions and strategies that can be applied and used in a school setting to support students affected by trauma.
CHAPTER 2
LITERATURE REVIEW

This chapter contains a review of the literature related to children who have experienced the effects of trauma due to maltreatment. The literature review is broken down into five parts. First, different types of maltreatment children experience will be described. Second, the prevalence of maltreatment will be presented. Third, the physical, psychosocial, and behavioral effects of maltreatment will be discussed. Fourth, implications of maltreatment for schools are explained, including the cognitive, social, emotional, and behavioral implications. Fifth, common treatments for maltreatment and its resulting trauma are described. These five areas were selected for the literature review to provide a comprehensive overview of child maltreatment and the challenges presented as a result of its resulting trauma.

Types of Maltreatment

Sneddon (2003) explained the different types of maltreatment, provided definitions and characteristics of sexual abuse, emotional abuse, physical abuse, and neglect. She compiled information about maltreatment into a comprehensive overview on all types of maltreatment, rather than focusing on one specific type. Sneddon concluded that maltreatment includes sexual, emotional, and physical abuse, and neglect. In order to provide a thorough explanation, each type of maltreatment was defined, explained, and effects were described.

Sexual abuse. According to Sneddon (2003), sexual abuse occurs when a child or adolescent is involved in sexual activities that he or she does not understand or in which he or she is unable to give informed consent. It may include an adult using a child
for sexual gratification and may occur on a contact or non-contact basis. A variety of sexual behaviors between a child and an adult or between children are considered sexual abuse. They may involve bodily contact and non-bodily contact such as genital exposure, verbal pressure for sex, and sexual exploitation.

Although Sneddon (2003) compiled a thorough list of behaviors that are considered sexual abuse, it is important to note that there is disparity in the research surrounding the definition of child sexual abuse (Haugaard, 2000). Most researchers agree that behaviors such as having sexual intercourse with a child is sexual abuse, however, there is ambiguity surrounding behaviors such as sleeping with a child or bathing a child. Haugaard examined different behaviors and found the importance of not only considering the behavior itself, but also the severity continuum on which sexual behaviors can fall and the context surrounding these behaviors. For example, a father bathing a small child is considered appropriate but if that context changes and he is bathing an older child then that same behavior may be considered inappropriate. Haugaard introduced a different set of behaviors and circumstances that were not explored and considered by other researchers. Although some researchers, like Haugaard, question the ability to accurately and clearly define the spectrum of behaviors considered when discussing child sexual abuse, there is consensus that the behaviors described by Sneddon (2003) are sexual abuse and will affect the child(ren) adversely.

**Emotional abuse.** Sneddon (2003) explained emotional abuse as the emotional mistreatment or rejection of the child. Emotional abuse may include sustained repetitive inappropriate emotional responses and reactions to the child’s emotions and behavior. For example, an inappropriate response may involve a parent getting angry with the child
in reaction to the child accidentally breaking something and yelling at the child excessively or calling the child names. In addition, other emotionally abusive behaviors include belittling or terrorizing the child, isolating them from others, and rejection or mis-socialization. Turner et al. (2012) added that emotional maltreatment may include hostile parenting, such as inconsistency, poor stability, low nurturing, coercion, negative interactions, and rejection of the child.

The research and discussion surrounding the definitions of emotional abuse is difficult due to its nature of lacking a tangible, physical quality to be observed. There are varying definitions among clinicians, advocacy groups, and lawmakers. It is especially difficult to prove actual, measureable damage to the child due to the emotional nature of the abuse (Hamarman, Pope, & Czaja, 2002).

Smith Slep, Heyman, and Snarr (2011) outlined the difficulty in defining emotional abuse, and also took into consideration cultural factors. Internationally, verbal punishment is used 70-85% of the time (e.g. yelling). The question is then asked, is this emotional abuse or is it part of a family or group culture? After examining research and other definitions of emotional abuse, their findings and definition support Sneddon’s (2003) definition of emotional abuse, outlining parental behaviors such as, humiliating, degrading, berating, threatening, abandoning, or coercing the child, and using excessive discipline. Although there are multiple opinions and definitions surrounding emotional abuse, there is consensus on the devastating effects caused by these behaviors towards children.

**Physical abuse.** Physical abuse is when someone causes deliberate physical harm or injury to a child or failure to prevent the child from physical injury. Physical abuse
refers to injuries and adult behaviors that are not sexual in nature. Physical abuse may include injury from punishment that is not appropriate for the child’s age or condition and can be a single or recurrent act by the adult (Sneddon, 2003).

In comparison to the difficulty and disparity among definitions of other areas of maltreatment, the definitions of physical abuse are more streamlined and agreed upon among researchers, clinicians and lawmakers. The tangible, visible, observable qualities of physical abuse make it easier to define. However, some researchers still pose questions. Whitney, Tajima, Herrenkohl, and Huang (2006) stated that most actions considered to be physical abuse are clear and easy to identify. Although they believe that most actions of physical abuse are easy to classify, they also believe it is important, with some actions, to consider the context surrounding the behavior before classifying it as abuse or not. For example, Whitney et al. (2006) explained that burning a child with a cigarette would always be considered abusive, whereas, shaking a child could depend based on the child’s age (e.g. shaking a baby has different consequences than shaking a teenager). Cruise, Jacobs, and Lyons (1994) believed it is important to examine parental intent, while stating how difficult this is to judge accurately. They also feel that the perceptions of the child, in relation to the abusive acts, should be considered and are helpful in the defining process. Even with some researchers raising questions about the definition of physical abuse, it is still the easiest and most objective form of maltreatment to identify.

**Neglect.** Neglect is the failure to protect a child from any type of danger or care for the child. Neglect may include insufficient attention to the child, stimulation, emotional availability, food, clothing, shelter, hygiene, nutrition, supervision, medical
care or education that could result in harm to the child. Neglect may include failure to provide mental health treatments or prescribed medications, exposure to dangerous environments, or placing the child under the supervision of an inadequate caregiver (Sneddon, 2003).

Similar to the other areas of maltreatment, the definition of neglect varies among researchers and lawmakers. It is difficult to judge the severity of the omitted acts by parents to determine neglect (Mennen, Kim, Sang, & Trickett 2010). Given that these omitted acts fall on a spectrum, some researchers pose the question, at what point does a lawmaker or agency decide that a child’s needs are not being met? (Dubowitz et. al, 2005). Several different groups of researchers, summarized by Mennen et al. (2010), proposed different groups of neglect subtypes, which include physical, mental health, cognitive, supervision, educational, emotional, and medical neglect. Although each of these sets has different specific subtypes, there are commonalities among them, including the physical, emotional, mental, cognitive, medical, educational and psychological needs of the child not being met. Lastly, English, Thompson, Graham, and Briggs (2005) believed that the severity or level of neglect should be based on child development and that the definition of neglect should be focused on the needs of the child and ability to function physically and psychologically.

Prevalence of Maltreatment

A summary of statistics related to maltreatment was compiled from the United States Health and Human Services Child Maltreatment Report (2011). The Child Maltreatment Report is completed by the National Child Abuse and Neglect Data System (NCANDS), based on annual data collected from Child Protective Services (CPS).
Referrals are made to CPS based on suspected abuse or neglect. If a referral is screened-in, then it becomes a report and usually warrants a CPS investigation. Data for the NCANDS Child Maltreatment Report is obtained from these reports and investigations. The data obtained includes information about the CPS reports, the children involved, the types of maltreatment, CPS responses, risk factors of the child(ren) and caregiver, any services provided, and the perpetrator(s). In 2011, 676,569 unique child maltreatment victims were reported, meaning each child was counted once regardless of how many reports were made on that child. Yet, 3.4 million referrals were made in regard to child abuse and neglect.

Based on CPS reports of child maltreatment to NCANDS, 78.5% of the reports were for neglect, 17.6% for physical abuse, and 9.1% for sexual abuse. Girls and boys were victimized at rates of 51.1% and 48.6% respectively, while less than 1% of victims reported an unknown gender. Caucasian children represented the largest group with 43.9% of victims, Hispanic children made up 22.1% of victims, and African American children accounted for 21.5% of victims. As children grow older, the number of victims decreases. For example, whereas 27.1% of the victims were less than two years old, 19.6% were three to five years old, 16.4% were six to eight years old, 13.7% were nine to eleven years old, 12.9% were twelve to fourteen years old and 10.3% were fifteen to seventeen years old.

Included in this same report were statistics related to fatalities as a result of maltreatment. There were 1,570 fatalities reported and 81.6% of those were children under the age of four. Neglect is the number one (71.1%) cause of fatalities, followed by physical abuse (47.9%). The reason the total number of fatalities is higher than 100% is
because more than one type of maltreatment could be reported for each fatality. As a result of maltreatment, boys have a death rate of 2.47 per 100,000 and girls have a death rate of 1.77 per 100,000.

The same report identified perpetrators as those people who caused the maltreatment. Perpetrators were identified by their relationship to the child and it was reported that 81.2% of perpetrators were parents, 12.8% were non-parents (e.g. daycare workers, foster parents, legal guardians, partner of a parent, a relative, group home worker, educational personnel, friend/neighbor), and 6.1% were unknown.

The prevalence of child maltreatment can be affected by parenting style. Hostile and inconsistent parenting is the strongest predictor of child symptomatology related to maltreatment (Turner et al., 2012). Turner and colleagues conducted their study using 2,017 children, ranging in age from two to nine years old. Nine measurements were used and correlations were computed to draw conclusions about the association of parenting style and prevalence of maltreatment. These measurements assessed victimization, parenting behavior, parent conflict, parental dysfunction, family adversity, residential stability, family risk index, trauma symptoms, and demographics. Based on their findings, the largest majority of maltreatment perpetrators were parents.

**Effects of Maltreatment**

Maltreatment and its resulting trauma have serious effects on children’s health and development, leaving both long and short-term emotional and behavioral difficulties. Children who have been diagnosed with PTSD may develop psychiatric or medical conditions as a result of maltreatment (Cohen, Berliner, & Mannarino, 2010). These children may also struggle to build and maintain relationships, their sense of self is
altered, fear and distrust of adults may develop, coping skills are compromised, aggression is displayed in play, and the need to establish control is observed in multiple environments (Hughes, 2004; Stubenhort, Cohen, & Trybalski, 2010). Child maltreatment has significant physical and psychosocial effects, as well as considerable effects on a child’s behavior and academic achievement. Numerous studies have been conducted to examine and define the multitude of effects of maltreatment (e.g., Carpenter, Shattuck, Tyrka, Geracioti, & Price, 2011; Lee & Hoaken, 2007; Spann et al., 2012). These researchers included both qualitative and quantitative designs, as well as reviewing compiled research information. These studies also varied in length, including longitudinal studies following children who experienced some form of maltreatment into adulthood to further examine the effects of the maltreatment.

**Physical effects of maltreatment.** In a review of the research, Cohen, Perel, DeBellis, Friedman, and Putnam (2002) described the physical problems associated with PTSD as a result of maltreatment. It can cause a child’s stress adaptation systems to be overwhelmed, resulting in overstimulation of the amygdala which may explain recurrent traumatic memories and excessive fear and emotional memory processing, increased dopamine levels contributing to overgeneralized fear, hyper vigilance, and paranoia. In addition, the norepinephrine system is one of the stress response systems in the body and when this system is affected it results in feelings of fight or flight in a child causing heightened anxiety, arousal, and hyper vigilance of potential dangers and elevated levels of cortisol, affecting the hippocampus and corpus colossum communication between both brain hemispheres. Children with PTSD have lower levels of serotonin, which is associated with symptoms such as aggression, suicide, obsessive and compulsive
behaviors, and depression. Post Traumatic Stress Disorder in children can lead to increased release of endogenous opiates, which can cause psychic numbing, avoidance of traumatic reminders, and diminished sensitivity to pain. Finally, the stress caused by PTSD suppresses the immune system resulting in other potential health problems or illnesses.

Putnam (2009) outlined additional physical effects of maltreatment, which included somatization, sexual difficulties, increased physical arousal, sleep disturbances, and psychosomatic symptoms. She also provided information related to PTSD, including symptomatology, assessment and diagnosis, treatment and implications. This information was provided based on three case examples of PTSD, with participants 15, 13, and 10 years old. One specific physical effect of sexual abuse may be enuresis, which describes bath-rooming problems associated with the abuse (Trickett & McBride-Change, 1995). Trickett and McBride-Change examined research studies focusing on infants through adulthood to understand the developmental affects of maltreatment. These findings were organized into information about the short and long term impact of maltreatment in three categories: (a) physical and motor development, (b) social and emotional development, and (c) cognitive and academic development.

Psychosocial effects of maltreatment. In addition to physical health problems, children who have experienced maltreatment may display a variety of psychosocial problems. Marquis, Leschied, Chiodo, and O’Neill (2008) found that these children have impaired interpersonal relationships with peers and adults and intense feelings of rejection. In a review of 110 child protective files, 79 neglect and 31 physical maltreatment, Leschied and colleagues examined children’s experiences while in foster
care and their behavioral outcomes and comparing physical maltreatment and neglect. They found that both maltreated and neglected children encountered numerous difficulties while in foster care, maltreated children have more overall behavioral difficulties, conduct related concerns, and hyperactivity than neglected children, but no differences were found between these two groups in anxiety-related or aggressive behaviors. Rees (2008) expanded on these difficulties, adding that maltreatment distorts a child’s perceptions and beliefs about relationships, including how to form and maintain healthy relationships with peers or adults.

In a review of the PTSD literature Bernardon and Pernice-Duca (2010) found that psychosocial problems included disorganized or insecure attachments, chronic and long-term anxiety that effects overall functioning of a child, social deficits, depression, and poor family functioning. They examined PTSD from a family-systems perspective and described contextual risk factors, the impact of PTSD on family subsystems, evidence supporting family systems interventions, and narrative family therapy. Children who have experienced maltreatment have low self-esteem, lack of confidence, and emotional problems (Sneddon, 2003). Emotional problems as a result of maltreatment may include mood disorders, anger, frustration, pervasive distrust of others, restricted affect, irritability, anxiety and depression, and social withdrawal (Putnam, 2009). Putnam also described that child maltreatment may cause a child to experience flashbacks, nightmares, intrusive memories of the maltreatment, dissociative symptoms, avoidance of certain stimuli associated with the maltreatment, and cognitive suppression. Children who have experienced maltreatment may display a mood of general unhappiness (Sneddon, 2003).
**Behavioral effects of maltreatment.** Marquis et al. (2008) found that maltreatment may lead to higher rates of conduct problems, physical and verbal aggression towards peers and adults, and noncompliance. Sneddon (2003) added behavioral problems such as aggressive play, oppositional behavior, delinquency, criminality, self-injurious behavior, suicidal behavior, substance abuse, and fighting with peers. Children who have experienced maltreatment may also display hyper-alertness, hyper-vigilance, increased physical arousal, exaggerated startle responses, and angry or aggressive outbursts (Putnam, 2009).

**Treatments**

Multiple approaches have been used with children to treat the effects of trauma as a result of maltreatment. These different approaches can be categorized into cognitive, family oriented, psychoanalytic, social, or pharmacologic.

**Cognitive treatment approaches.** Cognitive approaches are used to address a child’s dysfunctional thoughts, feelings, and behaviors. One approach is Trauma Focused Cognitive Behavioral Therapy (TF-CBT), which was designed to address trauma related emotional and behavioral problems that targets both parents and children (Cohen et al., 2010). Cognitive behavioral therapy (CBT) is designed to target and address trauma related thoughts, feelings, and behaviors through psycho-education, gradual exposure, reframing, stress management, and parent training. The research surrounding the use of TF-CBT and CBT is vast. It is a well-supported intervention to use with children. Research has been conducted on its use alone and in combination with other interventions such as play therapy and behavior management strategies. Studies have included reviews, research studies varying in size, case studies, and randomized control
trials (e.g., Allen & Johnson, 2012; Cohen et al., 2010; Feather & Ronan, 2009; Grasso, Joselow, Marquez, & Webb, 2011; Scheeringa, Weems, Cohen, Amaya-Jackson, & Guthrie, 2011). Results from each area indicate the effectiveness of these cognitive approaches, a relief in symptoms, an effective intervention to manage behavior problems associated with maltreatment, and a way to work on coping skills and cognitive and emotional processing.

**Family oriented treatment approaches.** Family oriented approaches are designed to assist in addressing any issues within the family unit as a whole and increasing the positive and effective functioning of that family (Cohen, Mannarino, Murray, & Igelman, 2006). Cohen et al. (2006) described multiple interventions including Family Interventions, which is a systematic program that is focused on improving parent-child interactions and providing parent training. Corcoran (2000) found that it is beneficial and effective to provide parent training on effective behavior management techniques and on effective parent-child interactions.

Multi-Systemic Therapy (MST) is supported by research (Corcoran, 2000; Cupit Swenson, Schaeffer, Henggeler, Faldowski, & Mayhew, 2010). Multi-systemic therapy increases support, cohesion, and adaptability within the family (or caregivers) and decreases hostility and conflict (Corcoran, 2000). Multi-systemic therapy addresses aspects of parenting associated with maltreatment, decreasing parental assault and neglect towards the children in the family and increasing parental support (Cupit Swenson et al., 2010).

Non-Directive Supportive Therapy (NST) is provided to a child and his or her parent and is designed to establish a trusting therapeutic relationship which affirms,
empowers, and validates the child and parent (Cohen, Mannarino, & Knudsen, 2005). The literature on NST is limited. Research has been conducted on adults with depression and a randomized control trial on children, both showing positive outcomes when using this approach (Cohen et al., 2005). Attachment focused interventions facilitate healthier bonds between parents and children, focusing on physical and emotional attunement and communication. In a case study, May (2005) explored family attachment narrative therapy. She found improved functioning and ability to accept care and love in a relationship by using narratives to help with processing, healing, and to work to develop relationships with parents or caregivers. According to Turner et al. (2012), children and their caregivers need to develop safe, stable, and nurturing relationships to treat the effects of trauma caused by maltreatment. These safe, stable, and nurturing relationships apply to children and any caregiver, which could include parents, other family members, teachers, or other school staff. In an additional study, Thornberry et al. (2013) examined adults with a history of maltreatment as children and found that, by enhancing their safe, stable, and nurturing relationships in early adulthood, the odds of the person becoming a perpetrator as an adult would decrease.

**Psychotherapeutic treatment approaches.** Psychotherapeutic approaches have been used with children and their families to address behavioral concerns (Dowell & Ogles, 2010). Dowell and Ogles stated that in a therapeutic setting, children and families can work on problem solving skills, self-esteem, self-control, emotional regulation, and executive functioning skills. In relation to children who have experienced maltreatment, it is important for the therapist, counselor, or psychologist to be aware, if possible, of any
abuse and neglect so that it can be addressed in the psychotherapeutic treatment (Suffridge, 1991).

Becker-Weidman (2006) described Dyadic Developmental Psychotherapy, which focuses on developing a collaborative relationship between the therapist and child, the caregiver and the child, and the therapist and the caregiver. Dyadic Developmental Psychotherapy is different than traditional therapy because there is a greater emphasis on experience and process rather than verbalization and content. In Dyadic Developmental Psychotherapy sessions, the focus is on helping the child develop his or her own personal experiences related to the trauma and to assist in the process of reducing the effects of the resulting trauma by modeling a healthy attachment style, reducing shame, nurturing physical contact, and teaching affect regulation. In comparison, traditional therapy is based on problem solving and encouraging the child to talk about what happened, experiences, and how to handle those thoughts and emotions (Becker-Weidman, 2006).

Psychoanalytic treatment, specifically for sexually abused children, is aimed to reduce PTSD symptoms, become more aware of unconscious defense mechanisms, and enhance positive adaptation (Trowell et al., 2002). In addition to the psychoanalytic sessions, clinicians worked with parents to partner and be supportive of the therapy, also they helped parents address issues within the family. In their study, Trowell and colleagues examined symptom reduction and functioning by comparing individual and group sessions. Although both groups showed a decrease in psychopathological symptoms and in increase in overall functioning, the individual treatment group showed a greater reduction in PTSD symptoms.
**Social treatment approaches.** Social interventions focus on a child’s social relationships and increasing his or her appropriate interactions with peers. Play based interventions are used to decrease internalizing behaviors, interrupt the cycle of externalizing behaviors, and address trauma behaviors (Stubenhort et al., 2010). Research studies have been conducted to examine the effectiveness of play therapy. In one such study, Scott, Burlingame, Starling, Porter, and Lilly (2003) found that play therapy had a positive impact on a child’s self-esteem and overall improvements in mood, social interactions, self-concept, and self-esteem. They also stated that the effectiveness on coping and positive family functioning would increase when combined with other treatment approaches. Misurell, Springer, Acosta, Liotta, and Kranzler (2014), used game based CBT and targeted internalizing and externalizing behaviors, trauma specific symptoms, and sexually inappropriate behaviors. They found this approach was effective in improving behavior problems in all of the target areas by integrating play therapy with CBT. Therapeutic preschools provide a combined approach of play therapy with structured therapeutic interventions in the classroom environment. Resilient Peer Treatment (RPT) is a classroom intervention for victims of abuse and neglect. Withdrawn children are paired with resilient peers in the general education classroom and the goal is to increase positive peer interactions and decrease solitary play (Fantuzzo et al., 1996). The findings in this study were replicated in a later study (Fantuzzo, Manz, Atkins, & Meyers, 2005). With a sample size twice as large, Fantuzzo and colleagues also found that when using RPT there were increased levels of collaborative and positive peer play, promoting positive peer relationships and decreasing solitary play.
Psychopharmacological treatments. Finally, many psychiatrists use a psychopharmacological approach (Huemer, Erhart, & Steiner, 2010). Medications are prescribed to treat the effects and symptoms associated with trauma caused by maltreatment. A variety of medications are used to treat these symptoms including medications designed to treat anxiety, depression, mood disorders, bipolar disorder, attention deficit hyperactivity disorder (ADHD), and sleep disorders (Huemer et al., 2010). As new drugs come onto the market, the research is ever changing, yet does encompass a variety of different types of medications (i.e. anti-depressants, mood stabilizers).

Implications of Maltreatment in the School Setting

The implications of maltreatment in the school setting are deleterious. Children who have experienced maltreatment may be significantly affected in the school setting. As a result of maltreatment, children may experience overall school difficulty, poor school functioning, and lower achievement (Sneddon, 2003). Consistent with the description of hostile parenting, Frederick and Goddard (2010) identified that family factors are associated with a child’s success at school. These factors included parenting style, parental nurturing and warmth towards the child, firmness with the child, and reasonability of expectations placed on the child. They also found that parenting style may affect a child’s success with their peers. These familial factors were identified in a qualitative research study, consisting of interviews to explore the consequences of experienced abuse and neglect in the school setting. Twenty people were interviewed, ages 19 to 51, in order to reach these conclusions about the connection between abuse and neglect and school success.
Many physical, psychosocial, and behavioral effects of maltreatment may also be evident and affect a child in school. For example, anxiety, a psychosocial effect, can affect a child’s ability to take risks in the academic setting in attempting an unfamiliar task or persisting on a difficult task (Ma, 1999; Mychailyszyn, Mendez, & Kendall, 2010). Depression, another psychosocial effect, can impact a child’s ability to build and maintain peer relationships. If a child has physical symptoms, as a result of the maltreatment, it could impact school attendance, which ultimately affects achievement.

A behavioral effect, such as aggression towards peers and adults, can be seen in the school setting, especially in a child who lacks appropriate coping skills to handle stressors present at school (Powell et al., 2011; Prinz, Blechman, & Dumas, 1994).

As a result of maltreatment, children may experience cognitive, social, emotional, or behavioral effects in the school setting. Maltreatment affects a child’s executive functioning skills, which can span cognitive, social, emotional and behavioral skills (Rees, 2008). Executive functioning skills include organization, response inhibition, emotional regulation, meta-cognition, flexibility, task initiation, sustained attention, time management, and memory.

Cognitive implications of maltreatment. Cognitive effects are evident in a child’s ability to function academically in the school setting. Putnam (2009) identified that children who have been maltreated have difficulty concentrating and display hyper-vigilance and hyper-alertness, which would impact their ability to focus on an academic direction or task. Leiter and Johnsen (1997) added that maltreatment may result in the possibility of grade retention, a drop in grade point average, decreased overall school performance, failing grades, poor attendance, and risk of dropping out. These researchers
looked at 967 randomly selected files, with criteria for maltreatment (location and age) from the Division of Social Services. Information was collected about their entire school history to date of the study. This information, along with the social service reports, was used to present an analysis of school performance declines among abused and neglected children over time. Maltreatment may also result in developmental, cognitive, and language delays (Trickett & McBride-Chang, 1995). Finally, children who have been maltreated display academic difficulties and increased learning problems (Daignault & Hébert, 2009; Trickett & McBride-Change, 1995). The impact of these academic difficulties and learning problems could be present across any academic subject area.

**Social implications of maltreatment.** The social consequences of maltreatment affect a child’s ability to interact with his or her peers and teachers appropriately. Rees (2008) found that children who experienced maltreatment displayed overall poor social skills and social immaturity. These children also struggled with peer problems such as being socially withdrawn, poor social problem solving skills, lack of affect when interacting with peers, lower peer status, peer rejection, uncooperative with peers, and limited peer acceptance (Hilyard & Wolfe, 2002; Trickett & McBride-Change, 1995).

Not only do children who have been maltreated struggle to interact with their peers, they may struggle with teacher relationships. Specifically, these children struggle to relate to their teachers or form appropriate relationships with them, ultimately impacting their success in the classroom (Leiter & Johnson, 1994).

**Emotional implications of maltreatment.** Emotional effects of maltreatment influence a variety of areas related to the emotions a child feels and is able to express. Maltreatment may cause a child to feel lower self-worth or self-esteem, or lack of
confidence (Rees, 2008). When a child experiences these feelings, his or her ability to attempt and then persevere on difficult academic tasks is compromised. Maltreatment may result in a child displaying difficulties with emotional awareness and regulation, and accessing appropriate coping skills (Hilyard & Wolfe, 2002). A variety of directions, situations, and tasks—in the academic setting—require emotional control. For example, if a child becomes stressed about an academic task, he or she is expected to be able to identify the feeling of frustration, and then cope appropriately, displaying appropriate emotional awareness, regulation, and control. Sneddon (2003) concluded that maltreated children often display learned helplessness, where they act helpless even with opportunities, provided by teachers or other adults, to receive assistance.

**Behavioral implications of maltreatment.** The behavioral implications of maltreatment in the school setting are same as the general behavioral effects. Children who have been maltreated may display behaviors in school such as aggression, anger outbursts, noncompliance, and opposition. Teachers may also see the effects of, or warning signs of, substance abuse, suicidal behavior, or self-injurious behaviors. These warning signs can include rage, reckless actions, feelings of being trapped with no options, increased substance abuse, social withdrawal, mood changes, truancy, and fatigue (Flaherty, Sutphen, & Ely, 2012; Miller & Eckert, 2009). Additionally, Daignault and Hébert (2009) added that children who have been maltreated may display behaviors in the classroom, which could impact their ability to participate in the classroom setting or interfere with the learning of other students. These authors conducted a study of 100 mother daughter groups to examine outcomes of sexual abuse by assessing the girls’ emotional, social, behavioral and academic functioning in school based on cognitive
functioning tests, self-reports and teacher and parent reports. This study further demonstrated how maltreatment could impact a student’s ability to participate in the classroom setting. The results of these reports showed that a more than half of girls, after disclosing sexual abuse, showed social, behavioral, academic, or cognitive difficulties. Additionally, the reports showed that sexual abuse put girls at a higher risk for academic difficulties and school adaptation problems, requiring additional services in school. Finally, maltreatment may also lead to higher discipline problems, resulting in more office referrals and in or out of school suspensions (Eckenrode, Laird, & Doris, 1993).

**Purpose**

The purpose of this thesis is to conduct a critical and descriptive review of the research related to children who experience trauma due to maltreatment—whether because of physical, sexual, emotional, or psychological abuse and neglect—their effects on children, and the potential impact in school and how educational personnel can support the needs of these students. Children experience other types of maltreatment, but because of the large number of children affected specifically by abuse and neglect, trauma from natural disasters (e.g. earthquakes, tornados) and war were excluded.

From this descriptive review, existing appropriate and applicable strategies will be modified and organized for educational personnel to use in a variety of school settings. It is imperative to empower educational personnel with strategies to assist them in supporting students who have been victims of maltreatment. The ultimate goal is to implement strategies, with students who have a known history of maltreatment, to increase their social, behavioral, and academic functioning. The strategies presented for educational personnel will be obtained from the research articles used in this study, other
There are four research questions this thesis is designed to answer: (1) Is there sufficient data examining child maltreatment? (2) What areas of child maltreatment have studies addressed? (3) What areas of child maltreatment require additional research? (4) Does the research on child maltreatment provide guidance on implementing strategies in schools that may provide positive outcomes for child maltreatment victims? It was hypothesized that there are sufficient data regarding treatments and supports available for ameliorating the effects of maltreatment in clinical settings. However, it was also hypothesized that the data are insufficient regarding interventions and strategies that can be applied and used in a school setting to support students affected by trauma.
CHAPTER 3

METHODS

The purpose of this thesis is to conduct a critical and descriptive review of the research, based on treatment studies, specifically related to children who have experienced trauma due to maltreatment—whether because of physical, sexual, emotional, or psychological abuse and neglect, their effects on children, and the potential impact in school and how educational personnel can support the needs of these students. From this descriptive review, existing appropriate and applicable strategies will be modified and organized for educational personnel to use in a variety of school settings. The ultimate goal is to implement strategies, with students who have a known history of maltreatment, to increase their social, behavioral, and academic functioning.

There are four research questions this thesis is designed to answer: (1) Is there sufficient data examining treatments related to child maltreatment? (2) What areas of child maltreatment have studies addressed? (3) What areas of child maltreatment require additional research? (4) Does the research on child maltreatment provide guidance on implementing strategies in schools that may provide positive outcomes for child maltreatment victims? It was hypothesized that there are sufficient data regarding treatments and supports available for ameliorating the effects of maltreatment in clinical settings. However, it was also hypothesized that the data, based on treatment specific studies, are insufficient regarding interventions and strategies that can be applied and used in a school setting to support students affected by maltreatment.

This chapter presents the methods used to obtain articles for this research study. First, an explanation is provided of how studies were identified and selected for inclusion
in this study, including eligibility criteria, sources of information, search terms, and study selection. Second, an explanation of the coding procedures used to organize specific elements of each study is described. These coding categories included the type of maltreatment, participant characteristics, the research setting, the study design, treatment approaches and length, outcome measures, and whether the intervention has been used, and implemented, in schools by educators. These areas were selected in order to develop a comprehensive understanding of the treatment based studies with children who had experienced maltreatment, in order to obtain or expand upon strategies, to provide applications for use in the school setting.

**Study Identification and Selection**

A systematic search was performed to collect data based research studies related to child maltreatment and the treatments aimed to mediate the effects of this maltreatment. These treatment based studies were organized for further analysis. In this section, eligibility criteria, information sources, and search terms are described.

**Eligibility criteria.** Exact criteria were developed to select specific research studies from a vast body of research on child maltreatment and the treatments of these effects. First, only studies published after 1980 were included in this search. The reason was that this year was when Post Traumatic Stress Disorder (PTSD) was added to the Diagnostic and Statistical Manual of Mental Health Disorders, third edition (DSM-III). Second, article selection was limited to journal articles, excluding book chapters and dissertations because articles for journals are typically peer reviewed, providing accountability for the research process and content through a specific review process before publication. Third, selected studies had participants who experienced some type
of maltreatment during childhood, including physical, emotional, and sexual abuse, and neglect. This criterion was to maintain the focus of the studies on one specific type of trauma, which is maltreatment, including physical, sexual, and emotional abuse, and neglect. Other types of childhood trauma were excluded and these excluded types of trauma included natural disasters, death, and domestic, war, and community violence. Also, studies outlining treatment for multiple types of trauma were excluded to maintain the focus on maltreatment, as stated in the purpose of this study. For example, if a study described treatment for children who had experienced maltreatment and survived a natural disaster, it was excluded. Fourth, studies were selected that identified a method for treating the effects of maltreatment so that strategies subsequently could be adapted for use in the school settings. Additionally, in order to maintain the focus on children and practical applications for the school setting, the treatment needed to be conducted during childhood. This criterion excluded studies where treatment was provided to adults who had experienced maltreatment as children. Finally, the initial search criteria included children pre-school to elementary age in order to focus on younger children due to the importance of early intervention. However, many studies included an age range that went beyond elementary age and into adolescence or adulthood. Numerous studies included elementary aged children but also included middle school and high school aged children. This criterion was then expanded to include children and adolescents, pre-school to high school age, specifically ages two to eighteen. This condition kept the focus on school age children, maintaining the purpose of the study to address the need for applicable strategies for use with school age children, but by expanding it to include all
school age children, this allowed the study to accommodate a larger group of children within the selected studies.

**Information sources.** Searches were conducted, using an electronic database, PsycINFO. Searches contained studies published from January 1, 1980 to April 1, 2014. Additional searches were performed using Academic Search Premier and ERIC to locate studies with implications for the school setting. However, all articles included were found within PsycINFO. MEDLINE was not used because pharmacological and other medical treatment studies were excluded due to the inability of teachers to utilize these treatments in the school setting.

**Search terms.** During multiple searches, a variety of search terms were used in conjunction with the previously stated parameters to obtain studies. Searches were conducted using the following Boolean phrases: abuse and neglect, child abuse, childhood, childhood trauma, effects of child maltreatment, impact of childhood trauma, implications of childhood maltreatment, maltreatment, neglect, trauma, and treatment. These search terms were used in isolation but also in combination to produce a broad range of studies to examine for inclusion in the study. Some search combinations included implications of abuse and neglect, treatment of child maltreatment, and school implications of childhood trauma.

Although the focus of the study was to identify treatment based studies, the term treatment was not used in every search because treatment based studies also came from using other search terms. Additionally, the terms children or adolescents were not used in every search to make sure and obtain all applicable articles. Treatment based studies,
conducted on children resulted in searches even when the search terms children or adolescents was not used.

**Study selection.** Initial searches produced 1,886 articles. Article screening was conducted by reading titles and abstracts to see if the article met the study criteria. For example, numerous studies were immediately excluded because the title referenced adults, which did not meet the inclusion criteria. Additionally, numerous articles were excluded upon reading the abstract and identifying that the study did not meet the study criteria. Reading the titles and abstracts of the studies excluded a majority of the studies initially found. The remaining, approximately 200 articles, were completely read and studies were selected that met the inclusion criteria. These studies included (a) children, ranging in age from pre-school to high school or two to eighteen years old, (b) the children experienced the maltreatment during childhood, (c) a treatment approach was used in the study to address the effects of the maltreatment, and (d) a publication date 1980 or later. Based on the inclusion criteria, 1,873 articles were excluded because they did not meet all of the inclusion criteria.

**Coding Procedures**

All of the articles obtained from the search were coded using seven categories: (a) type of maltreatment, (b) participant characteristics, (c) settings, (d) study design, (e) treatment approaches, (f) treatment length, (g) type of outcome measures used, and (h) relevance for educators.

**Type of maltreatment.** This category included coding for the type of maltreatment. All forms of maltreatment were included, specifically identifying emotional abuse, physical abuse, sexual abuse, or neglect. If the article did not
specifically state a type of maltreatment, they were coded using the general terms, maltreatment or abuse and neglect, depending on the term referenced in the article.

**Participant characteristics.** Information collected included the number of participants in the study, participant age and gender, any disability or medical diagnoses, and the participant’s living arrangements at the time of the study. These living arrangements included coding if the participant was living with his or her parents, living in foster care, or had been adopted. In addition, information about how participants were selected or joined a study was included. These methods included referral, recruitment through local agencies, and participation in selected preschool programs.

**Settings.** The setting where the treatment intervention took place was identified. Settings included clinical offices, treatment facilities, outpatient mental health clinics, households, and classrooms.

**Study design.** The design of each study was included for coding. These design features included research study, randomized controlled trial, and randomized effectiveness trial. Each study design will be assessed based on evidence-based practice quality indicators as outlined by the *What Works Clearinghouse* (2003) for group design studies and the Horner et al. (2005) quality indicators for single case experimental design (SCED) studies. According to the *What Works Clearinghouse* (2003), group design studies should incorporate three indicators in order to meet the “gold standard” criteria for an evidence-based practice. These indicators include using a randomized control trial study design, including at least 300 participants (at least 150 in each the control and treatment groups), and the intervention was implemented in at least two settings. In terms of single case design, Horner et al. (2005) outlined seven indicators for single
subject studies. Each indicator had at least one descriptor, with as many as five, to describe specific study elements and criteria that would support meeting the indicator criteria.

**Treatment approaches.** Treatment approaches were coded using the following categories: (a) cognitive approaches, (b) family approaches, (c) psychotherapeutic approaches, and (d) social treatment approaches. Studies were organized based on definitions of each treatment category explained in chapter two. Cognitive approaches are used to address a child’s dysfunctional thoughts, feelings, and behaviors. Family oriented approaches are designed to assist in addressing any issues within the family unit as a whole and increasing the positive and effective functioning of that family (Cohen, Mannarino, Murray, & Igelman, 2006). Psychotherapeutic approaches have been used with children and their families to address behavioral concerns (Dowell & Ogles, 2010). Social interventions focus on a child’s social relationships and increasing his or her appropriate interactions with peers.

**Treatment length.** The length of treatment was identified for each study. Study length ranged from three weeks to sixteen months. A few studies did not state a treatment length and one study stated that the treatment length varied depending on the treatment. These studies were coded as unknown treatment length.

**Outcome measures.** A variety of outcome measures were used. These measures were coded and included questionnaires, self-report tools for children, parents, and teachers, checklists, interview tools, observations, and rating scales. Specific outcome measures were recorded for each study and presented in a table format.
**Relevance for educators.** Based on the treatment used in each study, applicable strategies or applications of the treatment were recorded. A specific protocol was developed and used to determine the relevance for educational professionals. First, a list of all interventions and intervention components was created. Second, any intervention or intervention component, which was administered by a specially trained professional (e.g. researcher, clinician), was immediately excluded because these cannot be replicated or implemented by educators, such as different types of psychotherapy. Each additional intervention and component, not immediately excluded, was searched using ERIC, PsycINFO, or Academic Search Premier to identify if the intervention, regardless of the context or construct, had been used in the school setting. For example, if a study used self-monitoring as a component, then self-monitoring was searched to see if it had been used in school. The self-monitoring did not have to be used in schools to address maltreatment. Rather, the search focused on whether the type of technique had been used in schools in some capacity. Third, articles were scanned to determine who implemented the intervention (e.g. educator, clinician, other). A table was created to outline all interventions and intervention components, interventions that were immediately excluded, studies used in the school setting, and the professional implementing the study. This information will be critical in providing practical applications, of clinical treatments, for educators to use in the classroom.

**Inter-Rater Reliability**

Inter-rater reliability (IRR) was conducted using the 13 studies included in this study and 15 randomly selected discarded studies. The technique used to find the IRR was an audit (Creswell, 2012). This method was chosen to see if an individual, in a
related educational field, would rate the same samples of articles, using the same inclusion criteria. In order to complete the audit, the rater was given all 28 articles but did not know which articles were included in this study. This information was not given to the rater in order for them to draw their own conclusions about article inclusion and to calculate IRR. Inclusion criteria were outlined and then the rater read the studies to decide on inclusion. Additionally, the article selection procedure was audited and the rater’s process was in agreement with the process of the researcher. Inter-rater reliability was calculated by dividing the total number of agreements by the total number of agreements plus disagreements. One study was reviewed differently because of differences between raters on inclusion of maltreatment. The inclusion criteria specifically stated that the study needed to include maltreatment but this particular article included other areas of trauma (e.g. domestic violence) in addition to maltreatment. Hence, causing the difference in inclusion between raters.
CHAPTER 4

RESULTS

The purpose of this thesis is to conduct a critical and descriptive review of the research, based on treatment studies, specifically related to children who have experienced trauma due to maltreatment—whether because of physical, sexual, emotional, or psychological abuse and neglect, their effects on children, and the potential impact in school and how educational personnel can support the needs of these students. From this descriptive review, existing appropriate and applicable strategies will be modified and organized for educational personnel to use in a variety of school settings. The ultimate goal is to implement strategies, with students who have a known history of maltreatment, to increase their social, behavioral, and academic functioning.

There are four research questions this thesis is designed to answer: (1) Is there sufficient data examining treatments related to child maltreatment? (2) What areas of child maltreatment have studies addressed? (3) What areas of child maltreatment require additional research? (4) Does the research on child maltreatment provide guidance on implementing strategies in schools that may provide positive outcomes for child maltreatment victims? It was hypothesized that there are sufficient data regarding treatments and supports available for ameliorating the effects of maltreatment in clinical settings. However, it was also hypothesized that the data, based on treatment specific studies, are insufficient regarding interventions and strategies that can be applied and used in a school setting to support students affected by maltreatment.

Research for this study was conducted using PsycINFO to obtain relevant research studies for analysis and application. Eligibility and search criteria were outlined
in Chapter 3. Initial searches produced 1,886 articles. A two-step screening process was used to select studies that matched the study inclusion criteria and eliminate those that did not meet the criteria. First, article screening was conducted by reading titles to see if the article possibly met the study criteria. For example, articles were immediately excluded if the title referenced adults. Second, article abstracts were read to determine if the study met the inclusion criteria. Numerous articles were excluded upon reading the abstract and identifying that the study did not meet the inclusion criteria. Based on the inclusion criteria, 1,873 articles were excluded because they did not meet all of the inclusion criteria. Thirteen articles were selected for inclusion in this study.

This chapter presents the results of the coding analysis of the articles for this research study. Based on previously outlined coding procedures, results for each category are presented, summarizing the results from the articles used in this research study. This coding analysis included the type of maltreatment, participant characteristics, the research setting, the study design, treatment approaches and length, outcome measures, and relevance for educators. In Table A1, type of maltreatment, research setting, study design, treatment approach and length, and outcome measures is presented.

**Type of Maltreatment**

When analyzing type of maltreatment examined in each study, different terms were used to refer to maltreatment, which could include physical abuse, sexual abuse, emotional abuse, or neglect. It was found that three articles focused on maltreatment (Becker-Weidman, 2006; Fantuzzo et al., 1996; Stubenhort, Cohen, & Trybalski, 2010), five articles addressed sexual abuse (Cohen, Mannarino, & Knudsen, 2005; Cohen, Deblinger, Mannarino, & Steer, 2004; Deblinger, Mannarino, Cohen, Runyon, & Steer,
2011; King et al., 2000; Kmett Danielson et al., 2010), and two articles described child trauma (Turner et al., 2012; Van der Oord, Lucassen, Van Emmerik, & Emmelkamp, 2010). Finally, there was one article a piece that dealt with child abuse and neglect (Cupit Swenson, Schaeffer, Faldowski, Henaggeler, & Mayhew, 2010), maltreatment and Post Traumatic Stress Disorder (PTSD) (Feather & Ronan, 2009), and physical abuse (Runyon, Deblinger, & Steer, 2010).

**Participant Characteristics**

A total of 2,943 participants were included in the 13 studies in this research study. Participants’ ages ranged from two years old (Stubenhort et al., 2010) to 18 years old (Van der Oord et al., 2010) and had mean age of 10.7, with four studies not reporting a mean age (Becker-Weidman, 2006; Stubenhort et al., 2010; Turner et al., 2012; Van der Oord et al., 2010). There were substantially more females (n = 454) than males (n = 255) represented in the studies, with five studies not reporting gender information (Cupit Swenson et al., 2010; Kmett Danielson et al., 2010; Stubenhort et al., 2010; Turner et al., 2012; Van der Oord et al., 2010). One study that was conducted using 2,016 participants did not report gender information, causing a large disparity in the reported gender information compared to the total number of participants in all studies (Turner et al., 2012). A majority of the studies did not report any diagnoses of the participants. However, three different studies reported participants with PTSD (n = 64), anxiety (n = 16), generalized anxiety disorder (n = 7), specific phobia (n = 9), separation anxiety disorder (n = 8), pervasive developmental disorder, and attention deficit hyperactivity disorder or oppositional defiant disorder (n = 3) (Feather & Ronan, 2009; King et al.,
Multiple diagnoses were reported because one study reported multiple different diagnoses of the participants (Van der Oord et al., 2010). Participants living arrangements varied widely and seven studies did not report this information (Cohen et al., 2005; Cupit Swenson et al., 2010; Deblinger et al., 2011; Feather & Ronan, 2009; Stubenhort et al., 2010; Turner et al. 2012; Van der Oord et al., 2010). Reported living arrangements included parent (n = 712) (Cohen et al., 2004; King et al., 2000; Kmett Danielson et al., 2010; Runyon et al., 2010), adoptive parent (n = 5) (Cohen et al., 2004), foster parent (n=7) (Cohen et al., 2004), stepparent (n = 13) (Cohen et al, 2004), grandparent (n = 9) (Cohen et al., 2004), relative (n = 12) (Cohen et al., 2004; Kmett Danielson et al., 2010), guardian (n = 3) (Kmett Danielson et al., 2010), single adult home (n = 27) (Fantuzzo et al., 1996), two adult home (n = 19) (Fantuzzo et al., 1996), other (n = 6) (King et al., 2000), and one study reported that children were living in foster care or with adoptive families but did not specify how many (Becker-Weidman, 2006). The discrepancy in reported living arrangements compared to the total number of participants in all studies is due to one large study with 2,016 participants that did not report this information (Turner et al., 2012).

Referral was the most widely used method to gain participation in the research studies. A variety of referral methods were used, including selection based Child Protective Services (CPS) records, medical and mental health professional recommendation, community center records, law enforcement records, and school professionals (Becker-Weidman, 1996; Cohen et al., 2005; Cohen et al., 2004; King et al., 2000; Runyon et al., 2010; Van der Oord et al., 2010). Researchers in two studies used recruitment for participants to join the research studies (Cupit Swenson et al., 2010;
Kmett Danielson et al., 2010). Additionally, two studies took place in a preschool setting and the children in these studies participated because they attended the selected preschools. It was not stated how the preschools were selected (Fantuzzo et al., 1996; Stubenhort et al., 2010). In three studies, it was not stated how participants joined the study (Deblinger et al., 2011; Feather & Ronan, 2009; Turner et al., 2012). Descriptions of participant age, gender, diagnosis, living arrangement, and method of joining the study appear in Table A2, found in Appendix B.

**Settings**

The majority of studies were conducted in a clinical setting (n = 8). It was directly stated that four studies were conducted in a clinical setting (King et al., 2000; Kmett Danielson et al., 2010; Runyon et al., 2010; Turner et al., 2012), while four additional studies implied a clinical setting but did not state it directly (Cohen et al., 2005; Cohen et al., 2004; Deblinger et al., 2011; Feather & Ronan, 2009). Additionally, two studies were conducted in an outpatient clinic (Becker-Weidman, 2006; Van der Oord et al., 2010), one in a mental health center (Cupit Swenson et al., 2010), and two in a preschool (Fantuzzo et al., 1996; Stubenhort et al., 2010)

**Study Design**

Authors of six out of the thirteen studies specifically stated the research design: four used a randomized control trial (Cohen et al., 2005; Cohen et al., 2004; King et al., 2000; Kmett Danielson et al., 2010), one used a randomized effectiveness trial (Cupit Swenson et al., 2010), and one used a single case multiple baseline design (Feather & Ronan, 2009). The remaining seven studies conducted were research studies but the authors did not specify what type of research design was used (Becker-Weidman, 2006;
Deblinger et al., 2011; Fantuzzo et al., 1996; Runyon et al., 2010; Stubenhort et al., 2010; Turner et al., 2012; Van der Oord et al., 2010).

Of the 12 group design studies, four implemented a randomized control trial, one had more than 300 participants but did not specify treatment and control groups, and none of the interventions were conducted in more than two settings. Although some of the studies met parts of the criteria established by the What Works Clearinghouse (2013), none of the studies in this study meet all the criteria to be considered an evidence-based practice. In terms of the single case design study (Feather & Ronan, 2009), three of the quality indicators were completely met: (a) independent variable, (b) external validity, and (c) social validity. Of the other four quality indicators, some of the descriptors accurately described the study but not all descriptors were present in the study. For example, one quality indicator is participants and settings and the descriptors include participants described with sufficient detail, process for selecting participants is described, and features of physical setting are described. Of these three descriptors, the authors of the study only described the first, specific participant details, but the other two descriptors were not addressed in the study. The four indicators that were not fully met included participants and settings, dependent variable, baseline, and experimental control.

**Treatment Approaches**

Cognitive treatment approaches comprised a majority of the studies (n = 7). Of these seven studies, four studies utilized Trauma Focused-Cognitive Behavior Therapy (TF-CBT) (Cohen et al., 2005; Cohen et al., 2004; Deblinger et al., 2011; Feather & Ronan, 2009). The treatment components of TF-CBT included instruction in coping and social skills, gradual exposure, cognitive processing, child-parent sessions, psycho-
education, parent management skills, relationship building, general safety, body safety, abuse safety instruction, and stress inoculation techniques. One of these studies compared TF-CBT and Non-Supportive Therapy (NST). The components of NST included building relationships, active listening, reflection, accurate empathy, and talking about feelings (Cohen et al., 2005). Cognitive Behavior Therapy (CBT) was used in two studies (King et al., 2000; Runyon et al., 2010). The intervention components of CBT included psycho-education, affect regulation, coping skills instruction, cognitive coping skills, assertiveness skills, anger management, developing a trauma narrative, general safety skills, developing a personal safety plan, and problem solving skills. Cognitive Behavioral Writing Therapy was used in one study and the treatment components included psycho-education, exposure, cognitive restructuring, coping skills, and writing about abusive experiences (Van der Oord et al., 2010).

In addition, there were two studies that used a family treatment approach (Kmett Danielson et al., 2010; Turner et al., 2012). The family treatment components included psycho-education, coping skills, family communication, healthy dating and sexual decision making, re-victimization reduction, and relationship building. Two studies used a social treatment approach, which included developing a resilient peer play partner, establishing a play corner, training parents as play supporters, developing social skills, increase emotional competence, interrupting trauma-repetitive behaviors, providing a structured environment (Fantuzzo et al., 1996; Stubenhort et al., 2010). One study used a psychotherapeutic treatment approach, which included attachment strategies, reflection, addressing misattunements and conflicts in relationships, and cognitive behavioral strategies (Becker-Weidman, 2006). The treatment approach in one study was Multi-
Systemic Therapy (MST), that consisted of a wrap around intervention and the treatment components included cognitive interventions, behavioral interventions, individual and family therapy, functional analysis of the abuse, pharmacotherapy, and developing a safety plan (Cupit Swenson et al., 2010).

**Treatment Length**

Treatments ranged from one session to twenty-three sessions, averaging fourteen sessions per study. Four studies included follow-up contacts with participants, ranging from two to twelve months post treatment (Cohen et al., 2005; Feather & Ronan, 2009; Kmett Danielson et al., 2010; Van der Oord et al., 2010). Additionally, individual treatment sessions ranged from 45 minutes to 120 minutes, while five studies did not report the length of individual treatment sessions (Cupit Swenson et al., 2010; Fantuzzo et al., 1996; Feather & Ronan, 2009; Stubenhort et al., 2010; Van der Oord et al., 2010).

**Outcome Measures**

Specific outcome measures were reported in Table A1 for each study. A total of 50 different outcome measures were used to assess the effectiveness of the intervention being used. The Stubenhort et al. (2010) study only used one outcome measure whereas Deblinger et al. (2011) used the most outcome measures—a combination of 11 checklists, questionnaires, ratings scales, interviews, and self-report measures. In this section, a summary of the numbers of each type of outcome measure and the constructs they assessed are described.

Of the 13 studies, six checklists, 19 ratings scales, seven interview assessments, 10 questionnaires, two observation tools, three child self-report measures, one teacher-report measure, one parent-report measure, and one locally developed Likert Scale were
used to assess the effectiveness of the interventions used in the studies. There were nine constructs represented by the outcome measures: ten were used to assess PTSD or trauma related symptoms, four anxiety related symptoms, eight parenting skills, parenting style, and family environment, five general behavior, two depression related symptoms, eight social and coping skills, as well as, peer interaction skills, two specific to schizophrenia, two related to sexual abuse, and seven additional measures that do not fit these stated categories.

**Relevance for Educators**

Although many of the exact treatment approaches cannot be replicated or directly delivered in the school setting without the proper personnel or training, there are intervention components applicable and relevant to educators. In order to determine the relevance for educators, a list was made of all interventions and intervention components used in the 13 studies. Interventions, like psychotherapy, that cannot be replicated by educators were immediately excluded. The remaining interventions and components were searched using ERIC, PsycINFO, and Academic Search Premier to identify if the intervention component had been implemented in a school setting and who conducted the intervention, specifically looking for interventions in which school personnel had conducted the intervention instead of graduate assistants, clinicians, or researchers. For example, if a study used self-monitoring as a component, then self-monitoring was searched to see if it had been used in school. The self-monitoring did not have to be used in schools to address maltreatment. Rather, the search focused on whether the type of technique had been used in schools in some capacity.
The initial list included 50 interventions and intervention components. Fifteen interventions and components were immediately excluded because educators, due to a lack of the training needed for implementation, could not replicate them. Thirty-five interventions were then analyzed to identify if they had been conducted in a school setting, with the result that 22 of these were used in the school setting. Of these 22 interventions and components, educators provided the intervention for 14 of them. These 14 intervention components included social skills instruction, increasing emotional competence, cognitive processing, anger management skills, general safety skills instruction, body safety instruction, abuse safety instruction, teaching problem solving skills, establishing a positive peer play buddy, active listening, accurate empathy, cognitive behavior strategies, instruction about healthy dating, and structured environment (Cohen et al., 2005; Cohen et al., 2004; Deblinger et al., 2011; Fantuzzo et al., 1996; Feather & Ronan, 2009; King et al., 2000; Kmett Danielson et al., 2010; Runyon et al., 2010; Stubenhort et al., 2010; Turner et al., 2012; Van der Oord et al., 2010). A summary of this analysis appears in Table 4.1 and Figure 4.1. Further, there was literature to support two additional interventions in the school setting, but not actual research studies. These included family communication and relationship building.

<table>
<thead>
<tr>
<th>Total number of interventions and components</th>
<th>50</th>
</tr>
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<tbody>
<tr>
<td>Immediately excluded</td>
<td>15</td>
</tr>
<tr>
<td>Used in school</td>
<td>22</td>
</tr>
<tr>
<td>Used in school, by educators</td>
<td>14</td>
</tr>
</tbody>
</table>
Inter-Rater Reliability

Inter-rater reliability (IRR) was conducted using the 13 included studies and 15 randomly selected discarded studies (Creswell, 2012). Inclusion criteria were outlined and then the rater read the studies to decide on inclusion. Inter-rater reliability was calculated by dividing the total number of agreements by the total number of agreements plus disagreements and IRR was 97%. There were differences on one out of twenty eight studies rated. One study was reviewed differently because of differences between raters on inclusion of maltreatment. The inclusion criteria specifically stated that the study needed to include maltreatment but this particular article included other areas of trauma.
(e.g. domestic violence) in addition to maltreatment. Hence, causing the difference in inclusion between raters.
CHAPTER 5

DISCUSSION

The purpose of this thesis was to conduct a systematic narrative review of the treatment study research related to children who have experienced trauma due to maltreatment—whether because of physical, sexual, emotional, or psychological abuse and neglect, their effects on children, and the potential impact in school and how educational personnel can support the needs of these students. From this review, existing appropriate and applicable strategies were modified and organized for educational personnel to use in a variety of school settings.

Results of the present thesis can be summarized as follows from the 13 articles reviewed. First, five types of maltreatment were analyzed: (a) sexual abuse, (b) child trauma, (c) child abuse and neglect, (d) Post Traumatic Stress Disorder (PTSD), and (e) physical abuse. Second, there were 2,943 participants whose age, gender, diagnoses, living arrangement, and method for joining the study were coded and analyzed. Third, study settings included an outpatient clinic, mental health center, preschool, and clinical setting with seven studies not indicating the setting. Fourth, treatment length varied from one to 23 sessions and session length time from 45 minutes to 120 minutes. Fifth, nine different types of outcome measures were used including checklists, rating scales, interview assessments, questionnaires, observation tools, child self-report, teacher report, parent report, and a locally developed Likert scale. Finally, 50 total interventions and intervention components were analyzed for relevance to educators and 14 were retained that could be implemented by school personnel in school settings.
Type of Maltreatment

The specific definitions of neglect and each type of abuse were included in previous chapters. Definitions are critical when thinking about the educational applications of these studies and the terminology used. In this thesis, maltreatment was used to describe abuse and neglect, which included emotional abuse, sexual abuse, physical abuse, and neglect. When used generally, maltreatment would be considered synonymous with abuse and neglect. However, in half of the studies reviewed, authors used specific terms to describe abuse, outlining the type of abuse or specifically stating neglect was studied. According to O’Hagan (1995), the terminology is critical and it is imperative that researchers clearly define the type of maltreatment being addressed. O’Hagan (1995) further stated that although many terms included the word “abuse,” and that there are similarities among the different types of abuse, they are not synonymous and should be addressed accordingly. However, unless a child has disclosed to a teacher about the abuse and neglect, he or she may not know any specific details. Hence, educators tend to use the general terms abuse and neglect because they may lack details to use more specific terminology.

Conversely, Trickett Mennen, Kim, and Sang (2009) stated that it is both difficult to define some types of abuse (e.g., emotional abuse) and separate different types of abuse because they could be occurring simultaneously. Trickett et al. (2009) stressed that difficulty in writing clear definitions at the state and federal level presents challenges for providing treatment and intervention. Given the difficulties within and across definitions, it would be critical for educators to understand how each type of maltreatment may manifest itself in school settings. Consequently, it would be challenging for some of the
research reviewed to be replicated, unless the replicated study also addressed the same type of maltreatment.

**Participant Characteristics and Settings**

Of the eight studies that reported gender information, substantially more females participated in the studies than males. Rapee, Schniering, and Hudson (2009) found that gender is not a predictor of treatment outcome. Watson and Nathan (2008) also found no difference between the treatment of men and woman, both showing improvements with cognitive behavior therapy, which is the major treatment approach for children and adolescents who suffer from the effects of maltreatment. In schools, variations of cognitive behavior therapy or components of it could be considered as intervention options for both boys and girls. Although both male and females showed improvements with treatment, Reinemann, Stark, and Swearer (2003) found that sexually abused females reported higher levels of depression than sexually abused males. When implementing cognitive behavior therapy, there are gender differences in coping style, indicating that females are more likely to utilize seeking support as a strategy (Manassis, Avery, Butalia, & Mendlowitz, 2004). For educators, when considering student gender, it is evident that both girls and boys are responsive to cognitive interventions, but some considerations need to be made based on gender, specifically different coping styles and specific strategies related to depression. Therefore, educators need to be cognizant of these differences when teaching students to use coping strategies and recognizing that boys and girls may respond differently or select different strategies to use.

Participants in the current review ranged from two to 18 years old and received different interventions based on the study. When considering generalization of any
treatment or intervention, it is critical to consider the developmental state because the chronological age and developmental state of a child are not necessarily the same. For example, Grave and Blissett (2004) compared Piaget’s developmental theory with cognitive behavior therapy (CBT) principles and found that there were numerous components of CBT that can be implemented with younger children if developmental modifications are made. Components applicable for younger children included problem solving skills training, social skill training, self-control training and cognitive restructuring. Manassis et al. (2004) added that interventions and components may need to change over time to meet the developmental needs of a child. For example, a younger child may use a self-talk strategy with a basic phrase and as the he or she gets older, the phrase could change to become more complex. This example addresses not only a child’s chronological age but also his or her developmental state. When appropriate modifications are made, CBT can be effective with children as young as pre-school age (Minde, Roy, Bezonsky, & Hashemi, 2010; Monga, Young, & Owens, 2009). It is imperative for educational professionals to understand how developmental theory and maturity effects a child’s ability to participate in certain interventions and how changes need to be made in order to effectively implement the intervention based on these developmental and age considerations.

One of the studies reviewed had a much large number of participants than the other studies, making it difficult to analyze the impact of different participant characteristics on intervention efficacy (Turner et al., 2012). Although this study had a large number of participants and reported positive treatment results, it lacked specific methodological information that made it difficult to compare and contrast the results to
other studies. Ten studies did not report any participant diagnostic information while only three provided detailed information (Feather & Ronan, 2009; King et al, 2000; Van der Oord, Lucassen, Van Emmerik, & Emmelkamp, 2010). The omission of this information is important because different disorders can manifest themselves differently over time and at different stages of life (American Psychiatric Association, 2013). The majority of the studies were conducted in some type of clinical setting. Kratochwill and Shernoff (2004) cited the challenges that school psychologists and educators face when implementing any new intervention, specifically obtaining the necessary training. They pointed out that implementation barriers are present in educational settings that do not exist in clinical research settings. Koegel, Egel, and Williams (1980) also found that participants received higher levels of positive reinforcement in therapy versus school settings. These factors would need to be taken into consideration when implementing an intervention in a school setting that was previously conducted in a clinical setting. In order to understand reinforcement in the school setting, teachers must be willing to understand how their own behavior impacts a child’s behavior and be willing to change their own behavior as part of the intervention (Maag, 2001).

Kavanagh et al. (2009) described that CBT interventions can be provided by school staff, during the school day. This suggests that educators can implement elements of CBT in the school setting. These interventions could include social skills training, coping skills training, and problem solving training. Additionally, Urbain and Kendall (1980) stated that a variety of problem solving techniques, which are part of cognitive interventions, can be taught in the school setting, including, but not limited to, social...
skills training, teaching listening skills, role playing, self-control instruction, relaxation strategies, and utilizing peer support. Although the authors pointed out several components that can successfully be implemented in the school setting, teacher buy-in would be imperative in order for them to be willing to participate in training and then implement the intervention. This teacher buy in will directly affect the sustainability of the intervention as a child learns new skills and hopefully is able to generalize them to multiple environments.

**Study Design**

A comparative analysis was conducted to assess each study based on evidence-based practice quality indicators as outlined by the *What Works Clearinghouse* (2003) for group design studies and the Horner et al. (2005) seven quality indicators for single case experimental design (SCED) studies. According to the *What Works Clearinghouse* (2003), group design studies should incorporate three indicators in order for an intervention to be considered an evidence-based practice: (a) using a randomized control trial study design, (b) including at least 300 participants (at least 150 in each the control and treatment groups), (c) and the intervention was implemented in at least two settings. In the current review, 12 studies utilized a group study design. Of these 12 studies, four implemented a randomized control trial, one had more than 300 participants but did not specify treatment and control groups, and all of the studies were conducted in one setting. Although some of the studies met parts of the criteria established by the *What Works Clearinghouse* (2013), none of them met all the criteria to be considered an evidence-based practice.
One study in the present review used a single case research study design (Feather & Ronan, 2009). Horner et al. (2005) outlined seven indicators for single case research design studies. Each indicator had at least one descriptor, with as many as five, to evaluate specific study elements and criteria that would support meeting the indicator criteria. Of the seven quality indicators, three were completely met: independent variable, external validity, and social validity. Of the other four quality indicators, some of the standards accurately described the study but not all descriptors were present. For example, one quality indicator is participants and settings and three corresponding descriptors: (a) participants described with sufficient detail, (b) process for selecting participants is described, and (c) features of physical setting are described. Of these three descriptors, Feather and Ronan (2009) only described the first, specific participant details, but the other two descriptors were not addressed. The four indicators that were not fully met included participants and settings, dependent variable, baseline, and experimental control.

Additional information was reviewed for identifying and selecting evidence-based practices specifically for use in the school setting. Selecting strategies and interventions that are evidence based is important for educators. However, there is debate about the difference between the terms evidence-based, research based, and best practice and what is acceptable in the school setting (Cook & Cook, 2011). Although it is natural for teachers to rely on their own personal experience or the experiences of others, the problem with this approach is that the strategies are not always based on research or evidence to support the effectiveness of their use. Cook and Cook (2011) stated that evidence-based practices are instructional techniques with research supporting their
effectiveness, representing tools needed to bridge the research-to-practice gap, and improving student outcomes. Educational professionals are continuously looking for strategies and ideas to implement in the school setting that support students. These authors highlighted the importance of using evidence-based practices to connect research to practice. This is evident in the studies in this review because researchers tested strategies to support children who have experienced maltreatment and applications were made to current practice.

In determining an evidence-based practice, Cook and Cook (2011) referenced criteria for study design, the quality and quantity of studies, and the magnitude of effect of the intervention. In all of the studies in the current review, researchers found positive effects of the interventions implemented, indicating the magnitude of the effect of the interventions. Cook and Cook (2011) emphasized the importance of evidence-based practices having a positive effect on student outcomes as one piece of the criteria. Although the studies in this review did not meet all the criteria to be considered evidence-based practices, they did provide research positively supporting the intervention implemented.

According to Cook and Cook (2011), it is important to operationally define the instructional procedures, specifically outlining whom the intervention is for, where it will be implemented, and what exactly will be implemented. In all of the studies in the present review, the authors provided a detailed overview of the intervention used, including a breakdown of the components of the intervention but did not operationally define all of the procedures. In a school setting, it is common for multiple staff members to be involved including a school psychologist, resource teacher, classroom teacher,
social worker, administrator, or para-educator so it would be imperative to define the procedures of the intervention selected to implement in order for school staff to effectively implement it with fidelity.

In the present review, seven studies did not state the specific research design. In relation to the criteria for determining if an intervention is evidence-based, this conflicts with the criteria for specific study design. Cook and Cook (2011) differentiated other terminology used for referencing the support of strategies and interventions implemented in education. Although researchers agree upon the criteria for evidence-based practices, there are other terms used to describe educational practices that do not have as much agreement. For example, the term research-based practice is also commonly used. There is not agreed upon criteria, but a research-based practice can include any program or intervention with any amount of research available but this research isn’t necessarily robust in its support of the intervention. Additionally, the term best practice is also used to describe practices used in education. However, like research-based practices, best practices do not have an agreed upon criteria. They may or may not be research based and are typically based on tradition, expert opinion, or theory (Cook & Cook, 2011).

Given these two definitions, the interventions used in the studies included in this review could be considered research-based practices because there is research supporting the intervention. Cook and Cook (2011) highlighted that interventions can still be used in the school setting even if they do not meet the evidence-based practice criteria. However, when selecting interventions, it is important for educators to critically think about the students they work with because a certain evidence-based practice will not necessarily work for all students, all the time, just because it is evidence-based. It is imperative to be
outcome focused, thinking about what it is that students need to accomplish, and work as a team to select appropriate interventions to support that goal (Cook & Cook, 2011).

Treatment Approaches

An analysis was conducted to compare the different treatment approaches in the present review with interventions that have been used in school settings. This analysis showed that of the 14 interventions and intervention components reviewed, nine were from cognitive interventions, three from social interventions, and one each from family, psychotherapeutic, and Multi-Systemic Therapy (MST). There is a discrepancy between the total number of interventions and intervention components and the treatment approaches they were part of because some interventions and intervention components were utilized in multiple treatments. For example, social skills instruction was part of a cognitive treatment approach and a social treatment approach.

Cognitive based interventions have been widely used in school settings (e.g., Christner, Forrest, Morley, & Weinstein, 2007; Jones, Brown, Hoglund, & Aber, 2010; Rotheram-Fuller & MacMullen, 2011; Rutledge & Petrides, 2012; Yeo & Choi, 2011). However, components of the other interventions have also been used in schools. These components include coping skills instruction, social skills instruction, problem solving instruction, peer support, friendship groups, teaching listening and self-control skills, and utilizing relaxation and imagery strategies (Urbain & Kendall, 1980). It is important to note that although these are components of other interventions in the present review, they are also components of some cognitive interventions, increasing the research support to use them in school settings. These treatment and intervention components are feasible to
be used in schools by a variety of school staff even though some are part of more intensive interventions that, as a whole, would not feasible in a school setting,

Another treatment represented in the present study was MST. Although MST is a more intensive wrap-around program for children and their families and is not conducted in the school setting, educators can play a collaborative role that was part of this treatment. This intervention can involve collaboration between the child, family, the extended family, other family support, and community members. These community members can include school staff and while school staff would not be implementing the intervention, they could be involved in communicating with other treatment providers (Cupit Swenson, Henggeler, Taylor, & Addison, 2005). In addition, the treatment team should collaborate with teachers because teachers can play a role in supporting the treatment plan (Henggeler, Cunningham, Pickrel, Schoenwald, & Brondino, 1996). This collaboration could include sharing academic and behavioral progress by regularly providing updates, participating in team meetings, or allowing treatment providers to come into the school setting.

Treatment Length

Many of the treatments used in the reviewed studies were quite lengthy, spanning several months up to one year. Based on the Response to Intervention (RtI) model, which is currently used in many schools, an intervention is implemented for a short period, typically eight weeks, and then the intervention effectiveness is evaluated (Fuchs & Fuchs, 2006). However, within this model, there is regular progress monitoring conducted to decide if the child is making progress and if the intervention is appropriate. If the team, based on the progress monitoring data, deems the intervention appropriate,
the child can continue, increasing the time he or she spends participating in that particular intervention. There could be challenges in the school setting with longer treatments such as staff training, materials, or interventions offered. These could impact a school’s ability to provide long-term intervention but also balancing whether the intervention is appropriate based on a student’s needs and progress (Schaeffer et al., 2005). These staff challenges should be monitored and addressed in order to maintain staff willingness to participate in and implement the interventions.

Additionally, there is a dramatic difference when comparing the length of treatments used in the present review with the length of cognitive treatments conducted in the school setting. School-based cognitive interventions have ranged from six one-hour sessions (Rutledge & Petrides, 2011) to three months (Yeo & Choi, 2011). One exception to this are planned, yearlong interventions. Jones et al. (2010) highlighted a yearlong social intervention. Additional long-term interventions, specific to special education programming, have also been outlined (Fuller & MacMullen, 2011; Christner et al., 2007). These examples highlight the feasibility of how long a treatment can typically last in a school setting, stressing the need for the interventions in the present review to be modified in order be used in a school setting. In order for intensive or long term interventions to be implemented in schools, they would need to be a planned part of a class or special education programming routine.

**Outcome Measures**

In the present review, most of the instruments, unless unspecified, were completed by parents concerning their behavior or their child’s behavior. Teachers completed one measure in a study (Feather & Ronan, 2009). The outcome measures used
do have some implications for schools. According to the National Association of School Psychologists (NASP, 2009), administering, scoring, and interpreting test results of behavioral outcome measures is part of the scope of practice of a school psychologist. Consequently, many of the outcome measures used in the studies reviewed, would not be administered by a teacher but rather by the school psychologist. In the educational setting, data on a variety of assessments are used to support classroom decisions, conduct routine screenings, identify problems and conduct intervention planning, evaluate programs, and for diagnostic and eligibility decisions (National Association of School Psychologists, 2009). When selecting assessments in the school setting psychologists must recognize their own training and engage only in assessments for which they are qualified (National Association of School Psychologists, 2010).

Given the unique training in administration, interpretation, and analysis, school psychologists play a pivotal role in educational settings when it comes to assessment, whether it be directly administering, scoring, and interpreting assessment results or interpreting assessment results administered by an outside clinician. The role of the teacher, in terms of assessment, is to provide information. Many rating scales, such as, the Child Behavior Checklist (CBCL), have a teacher report form, allowing the teacher the opportunity to provide input regarding the behaviors observed in the classroom.

The outcome measures used in the present study provided information on different constructs such as Post Traumatic Stress Disorder and trauma, anxiety, parenting, general behavior, depression, social and coping skills, schizophrenia, sexual abuse and domestic violence, and others that did not fit a specific category. Of these constructs, only those examining anxiety, general behavior, depression, and social and
coping skills would be applicable for use in the school setting. However, a variety of assessments, completed by different professionals could be used in a school’s teaming and collaboration system. After assessments are completed and interpreted, the educational team, which can include a variety of professionals from different disciplines and the parent, can meet to share information, generate goals, or plan based on the results of the assessments (Carpenter, King-Sears, & Keys, 1998). When specifically thinking about a child’s behavior, assessment, and planning, functional based assessment is one example of how data, assessments, and teaming can be used to provide support in the school setting by a variety of school professionals (Scott et al., 2004). This process could include an administrator, school psychologist, social worker, resource teacher, classroom teacher, specialists, or para-educators.

**Relevance for Educators**

Given the multitude of effects of maltreatment on children, it is imperative that teachers have access to strategies for supporting these students. However, the reality is that a majority of research has been conducted in clinical settings with minimal applications in schools and, additionally, teaching behavioral strategies is provided minimally in teacher preparation programs (O’Neill & Stephenson, 2012). There are numerous children who have experienced maltreatment who are in general education classrooms but many teachers are not aware of them, and lack experiences and ideas for how to approach working with these students (Kenny, 2004; Randolph & Gold, 1994). Therefore, this section describes specific ways certain strategies described in Chapter 2 and in Chapter 4 can be implemented in schools and by which type of school personnel. This information focuses on five areas: (a) relationship building, (b) structures and
supports, (c) promoting social and coping skills, (d) family partnerships, and (e) cognitive behavior intervention components. Strategies from these five areas were selected because of having the most relevance and implications for educators in school settings.

**Building and maintaining effective relationships.** Building effective and positive relationships is obviously important when teachers are working with any student (Birch & Ladd, 1997). However, when working with students who have experienced maltreatment, it is critically important and needs to be an intentional focus using specific strategies. Without a concerted effort to build relationships, students who have been maltreated are less likely to trust adults. Furthermore, conflict in a teacher-student relationship produces additional stress for the child and can negatively impact his or her school adjustment (Birch & Ladd, 1997). Conversely, positive adult relationships are one way to establish school as a safe place. The specific strategies teachers can use to build positive relationships with students include (a) being consistent, (b) engaging in genuine and respectful interactions, (c) offering choices, (d) helping students build a positive self-esteem, and (e) identifying student perceptions and accommodating accordingly.

First, teachers have the power to be a consistent, positive figure in the lives of their students because, outside of the home, children spend more time in school than in any other setting. Consistency and being positive can be established by greeting students at the beginning of each day, showing them genuine regard and care, listening to them, providing them with reasonable and appropriate choices, and working to reduce stressors within their day.

Second, relationships are established through genuine interactions such as when teachers take careful attention to the tone of their voice and facial expressions displayed
(Daris, 2011). Students can be especially sensitive to these expressions and it is critical for teachers to monitor and adjust their own accordingly—especially if a student becomes upset—in order to maintain a relationship once it has been established. Monitoring expressions requires teachers to think consciously and critically about the type of interactions they have with certain students. Demonstrating respect to a student, even when he or she is misbehaving, is essential to maintain relationships that convey trust, safety, and security (Stubenhort, Cohen, & Trybalski, 2007). This recommendation is not to say that misbehavior should be ignored but rather discipline can be delivered in a consistent, positive fashion.

Third, educators can mitigate the effects of maltreatment and build positive relationships by offering choices to students. Offering instructional or behavioral choices, when appropriate and possible, empowers a child and gives him or her appropriate control which, in turn, further fosters a positive, trusting relationships with educators. By offering choices, students are less likely to view teachers as coercive and, consequently, more likely to display compliant behaviors (Urdan & Schoenfelder, 2006). Power struggles can be detrimental to a positive teacher-student relationship and offering students choices is one way to minimize their occurrence. For example, during independent work assignments, choices could include where to work, what work to complete, where to start on an assignment, what writing utensil to use to complete the assignment (marker, pencil, pen), the order assignments are completed, or even when an assignment is completed. Different choices could be offered to students during daily instruction such as having them decide what to do, where it will be done, how much will be done, the mode in which it will be done, and when it will be done.
Fourth, educators play a pivotal role in helping improve a child’s self-esteem and confidence. Educators can specifically help students make positive statements about themselves, such as helping them recognize their strengths and successes. To this end, self-instruction training provides a simple, effective strategy that has been used in schools for over 40 years (Meichenbaum & Goodman, 1971). The focus should be highlighting a student’s strengths and successes but not necessarily compared to other students. One activity that teachers could use is to designate a student as “star of the week,” which allows the student to showcase himself or herself by showing peers and other adults his or her interests and strengths. Focusing on students’ strengths further enhances the teacher-student relationship.

Fifth, educators can help students obtain more accurate perceptions of events and interactions with others. It is important to remember the trauma children experienced can result in their perceptions not matching what adults may see as rational or realistic. Helping students change their perceptions initially requires teachers to meet students in their frames of reference rather than trying to pull them into the adult view of reality (Maag, 1999). To do otherwise runs the risk of a student perceiving the school as a source of conflict, which in turn, impedes his or her progress and adjustment. For example, a student who has experienced maltreatment most likely has a low self-esteem and perceives all schoolwork as challenging even though the teacher knows the student is capable of doing the work with minimal assistance. However, instead of the teacher insisting that the child can do the work independently because he or she is capable of doing so, the teacher can join the student’s frame of reference, acknowledge how the work can seem really hard, but will provide assistance when necessary.
Structures and supports. Educators can provide structures and supports to build upon the foundation of a positive teacher-student relationship. These structures and supports include (a) creating a consistent and predictable environment, (b) utilizing visual supports, and (c) providing students with positive reinforcement.

First, it is necessary for educators to establish a consistent and predictable environment to support students. This predictability helps a child feel safe and secure, thereby reducing his or her stress (Swanson, 2005). Children may initially resist structure and respond in negative ways to test the consistency of these boundaries. During these times, it is critical for teachers to maintain consistency without damaging the positive relationship. Teachers should establish classroom expectations, routines, and procedures and consistently teach these to all students and consistently follow them. Students need to know they can trust teachers and rely on the predictability in the school setting.

Second, visual supports can be used to encourage routines, procedures, and expectations in the classroom. For example, teachers can create picture schedules, mini schedules, picture cues, or visual representations of expectations that can be used any time during the day (e.g. transitions or instruction). By utilizing visual supports, teachers can further create an environment of consistency and predictability while supporting language processing and executive functioning needs of students (Watson & Wesby, 2003). Furthermore, the term visual supports will be used to describe different tools based on the specific strategy being discussed. Each unique visual support example will be explained and examples given when discussing some of the cognitive behavior intervention components.
Third, the use of positive reinforcement increases the likelihood of students engaging in appropriate behaviors (Maag, 2001). It is important to carefully think about how, when, and with what criteria positive reinforcement will be provided to students. It is important to involve the student in generating reinforcers to ensure he or she finds them reinforcing. If it appears that positive reinforcement is not working, the student may have satiated and, in that case using different reinforcers or a more intermittent schedule of reinforcement would be warranted. There are a variety of novel, visually appealing ways reinforcement can be delivered such as the use of chart moves, point or ticket systems, raffles or lotteries, 100-square chart, or compliance matrices (Maag, 2004).

**Promoting social and coping skills.** Supporting the development of appropriate social and coping skills is a critical part for addressing skill deficits as a result of maltreatment. Educators can help students acquire social and coping skills by explicitly teaching them using a class, small group, or individual format (Dubow, Schmidt, McBride, Edwards, & Merk, 1993; Pincus & Friedman, 2004).

Teachers can lead social skills lessons based on observed skill deficits and provide students with explicit instruction, practice, and feedback (Lewis, Jones, Horner, & Sugai, 2010). Social skills instruction is used to teach replacement behaviors—an appropriate behavior that serves the same purpose as the inappropriate behavior (Gresham, Bao Van, & Cook, 2006). For example, a teacher may be concerned that a student is repeatedly disrupting instruction by blurting out to gain attention. The teacher can use social skills instruction to teach the student an appropriate way to get attention, raising his or her hand to talk. Regardless of the instructional format, a quick strategy
teachers can use is to prompt students with the expectations prior to a transition or at the beginning of an activity (Crosby, Jolivette, & Patterson, 2006). This type of prompting and review requires teachers to state and teach behavioral expectations. For example, as a class gets ready to transition from seatwork to lining up for recess, the teacher can prompt the class, stating the explicit expectations, have several students model appropriate transition behaviors, and then reinforce students who follow the expectations. Lewis et al. (2010) emphasize the need to provide specific feedback, including reinforcement, when students display appropriate behaviors, thereby increasing the likelihood that the student will continue to display the new skill.

Second, coping skills instruction is necessary to help children learn new ways to respond to and deal with stressful life events, such as maltreatment (Frydenberg et al., 2004). The inability to cope can lead to poor academic performance, highlighting the need for teachers to provide this support for students. Strategies for teaching coping skills include identifying triggers, using social stories, teaching a calming strategy, using visual supports, and teaching relaxation strategies. Educators can identify and monitor what environmental or emotional triggers set off problem behavior and then help the student use strategies to reduce the negative reaction to these triggers. In order to monitor for emotional triggers, educators need to be aware of situations that might cause a student to display an emotional reaction. For example, a teacher may be aware that a student will have an emotional reaction to an academic task that the student perceives to be difficult. With this prior knowledge, the teacher can intervene to reduce student stress as a result of the trigger. Additionally, social stories can be used to define a specific situation, show appropriate behaviors, and help a student understand the expectations.
from his or her perspective (Gray & Garand, 1993). For example, a social story can be used to support a child learning and practicing appropriate calming steps to use in certain situations or when he or she feels a particular emotion. Teachers can also work with students to identify and practice a calming strategy. For example, a “break card” can be given to a student and used whenever he or she recognizes stress building and, consequently, the need to calm down. The break card serves as a prompt for the student to engage in specific calming steps such as going to a predetermined location and doing a calming activity, thereby taking a break from the stressor. A visual three-point scale is another tool teachers can use to teach students an appropriate way to cope. A three-point scale outlines the connections between three levels of student behavior, adult responses, and student responses. This scale serves as a visual support for students that can provide additional cues and prompts for processing what teachers say to help students understand how their behavior, the teacher’s responses, and their choices for coping are related. Last, relaxation strategies can be used at any point in the school day when the teacher or student feels stress is developing. Relaxation strategies include positive imagery, drawing or journaling, progressive muscle relaxation, and quiet time alone (Lohaus, Klein-Hessling, 2003; Silvestri, Dantonio, & Eason, 1996).

**Family partnerships.** Partnering with a child’s family or team may be beneficial for educators (Edwards & Da Fonte, 2012). These partnerships can be developed and cultivated with open communication, viewing the family as a valuable component of this partnership, and keeping the focus on supports for the child. Communication in these relationships should be open, honest, trusting, and consistent. Consistency, in particular, fosters a partnership between the family, school, and child. However, not all family
situations where maltreatment has occurred are optimal. Family members may be dealing with their own mental health issues and possibly also being involved in the criminal justice system (Frederico, Jackson, & Dwyer, 2014). In these situations, it is nevertheless critical to continue using nonjudgmental communication that fosters understanding, with the mutual end goal of supporting the child.

One of the most important practices educators should avoid is simply creating plans for a child without family input and then presenting the plan to the family. This practice can cause misunderstandings, miscommunications, and results in a lack of family support for the plan. Schools need to include the family, in the greatest extent possible, in the planning process so that they can contribute important information and ideas. By doing so, family buy-in and support for the eventual plan will be enhanced.

**Cognitive behavior intervention components.** The purpose of cognitive behavior treatments is to change maladaptive thoughts. The cognitive ABC model provides a framework for understanding how events and pre-existing beliefs shape subsequent beliefs and student responses (Maag, 2004). Within a cognitive ABC model, A represents activating events, B stands for beliefs a student holds regarding the activating event, and C refers to both the student’s emotional reaction and behavioral response that are created from the held belief (Maag, 2004). The problem that students who have experienced maltreatment typically have is that they typically engage in maladaptive thoughts in response to the activating event. These maladaptive thoughts can range from saying something negative about oneself to incorrectly interpreting information, leading to cognitive distortions. Cognitive distortions are errors in a child’s thinking causing him or her to misunderstand or misinterpret actions, situations, or events
As a result of the emotional and physical effects of maltreatment, a child may experience any of the following cognitive distortions that can negatively impact his or her functioning in school: (a) dichotomous thinking, (b) overgeneralization, (c) mind reading, (d) emotional reasoning, (e) disqualifying the positive, (f) catastrophizing, (g) personalization, (h) should/must statements, (i) comparing, and (j) labeling (Mennuti et al., 2012). When utilizing cognitive behavior interventions, educators can help a child identify these thoughts, feelings, and behaviors and how they effect his or her functioning in school (Mayer et al., 2005).

Cognitive behavior treatment approaches were used in a majority of the studies in this present review. Cognitive behavior strategies are powerful tools to mitigate the effects of maltreatment and how they are manifested in the school setting. Although the interventions of this review were conducted in clinical settings, there are numerous cognitive behavior components can be used in the school setting (Mayer, Lochman, & Van Acker, 2005). Problem solving training is the general overall approach to cognitive behavioral approaches with the goal to teach students to solve problems effectively (Maag, 2004). Etscheidt (1991) outlined five steps of problem solving training that teach students to process and understand how to think about and deal with problems they may encounter: (1) stop and think, (2) identify the problem, (3) develop alternative solutions, (4) evaluate the consequences, weighing the pros and cons, and (5) select a solution and do it. A consequence or contingency map is a visual support that can be utilized during this problem solving process, helping students identify and outline choices to solve the problem. This map helps a student visualize the possible options he or she can choose from in the situation and guides the selection of a positive solution.
Given the understanding of the cognitive ABC model and the general problem solving focus of cognitive-behavioral strategies, specific interventions can be used to address the effects of maltreatment. In conjunction with elements of problem solving training, these cognitive interventions can be used in isolation or combined with one another to meet the unique needs of the student.

One strategy for identifying new adaptive thoughts is illustrating a person with a thought bubble and brainstorming new thought options to replace previous maladaptive thoughts. Students must be taught how to replace maladaptive thoughts in order for the positive ones to be internalized. Teaching replacement thoughts can be achieved by using self-instruction training and self-regulation strategies (Mayer et al., 2005; Meichenbaum & Goodman, 1971). In self-instruction training, a child learns to control his or her own thoughts and behaviors without always relying on adult prompts. The teaching process includes an adult modeling appropriate thoughts for a student, practicing with the student, and ultimately working towards the student independently using self-speech.

Self-regulation strategies can help students who have experienced maltreatment to change or maintain behavior, improve academic performance, increase student buy in to the intervention, and help generalize new skills across environments (Mayer et al., 2005; Mooney, Ryan, Uging, Reid, & Epstein, 2005). Self-regulation consists of three main elements: (a) self-monitoring, (b) self-evaluation, and (c) self-reinforcement. Self-monitoring requires a student to identify, observe, and record his or her thoughts, feelings, or behaviors. Self-evaluation involves the child comparing his or her performance to a preset standard. Educators can work with students to use these self-
instruction and self-regulation strategies throughout any part of the school day by first
identifying a thought, feeling, or behavior for the child to observe, providing prompts to
cue the student to self-monitor, and teaching the student to record his or her thought or
behavior. For example, self-instruction training and self-monitoring can be used in
conjunction to help a student stop negative thoughts. If a child is thinking “I hate school
because I can’t do anything right,” a teacher can begin by modeling for the student during
one activity positive self-talk, such as saying “I know school can be hard, but I do lots of
things right.” Then the teacher would support the student in practicing the positive self-
talk, working towards the student independently thinking positive thoughts and fading
away the adult modeling and support. While the adult support is being faded away, self-
monitoring can be used to continue to support the child in thinking the new positive
thoughts. One challenge to this approach is that a child’s cognitive distortions can
interfere with these processes, making it difficult for a student to see his or her actions
realistically. Therefore, the adult may have to scaffold supports or help the child address
the maladaptive thoughts prior to using self-instruction or self-regulation strategies
(Mayer et al., 2005).

Limitations

There are several limitations to the current study. First, none of the 13 included
studies met all quality indicators outlined for group and single case research. Several
studies met some of the criteria, but none of them met all of them. None of the 12 group
design studies conducted the intervention in two or more settings, which could impact the
generalization from the clinical to school setting. The one single case design study did
not meet any of the quality indicators for experimental control, potentially impacting the
application of the results of that particular intervention since additional variables or factors were not necessarily considered or controlled. The prevalence of child maltreatment and attention given to it far exceeds its body of treatment research. A second limitation is that only 13 studies met inclusion criteria. The research base for the effects of child maltreatment and how it is treated in adults is vast. However, with an N of 13 studies specifically looking at treatments conducted with children, it is difficult to draw generalizations. Third, the reviewed literature lacked research and applications of child maltreatment in the school settings. Therefore, it is again difficult to draw generalizations from results in clinical settings to the school environment.

**Areas for Future Research**

Given the relatively small body of research on the treatment of child maltreatment, further research is needed. As a result of all the studies being conducted in a clinical setting in the present analysis, future research is needed on interventions implemented in the school setting and conducted by educators, which would be beneficial for school personnel to understand how treatments and interventions can be applied and used in this setting. The RtI model, which is used in many schools, typically involves interventions lasting relatively short periods of time, such as 8 weeks with individual sessions ranging from 20-40 minutes (Fuchs & Fuchs, 2006; Grosche & Volpe, 2013). Therefore, future research is needed with interventions being used across shorter time periods and with shorter treatment sessions, which would allow for easier application in the school setting. DuPaul et al. (2015) stated that collecting and using teacher ratings are critical because symptoms may not be evident in a clinical setting that a teacher would see in the school setting. Additionally, students spend a significant amount of time
at school giving teachers valuable insight about their students’ behaviors. Outcome measures, like ratings scales, have been specifically designed to obtain teacher input. Therefore, future research using outcome measures to obtain teacher ratings is needed in order to fully understand the impact of an intervention in the school setting.

A majority of research on maltreatment interventions has been conducted on adults and older children. Within the present review, most of the study participants were older children. Maag and Katsiyannis (2010) stated the benefit of early intervention with children at risk for behavior problems. They specifically outlined the benefit of early intervention for preschool aged children. Therefore, more research is needed with participants ranging in ages from three to five to get early intervention when there is known maltreatment. Given the studies in the present review, females were significantly overrepresented compared to males. It is necessary to expand this body of research to examine the relation between treatment efficacy and gender with children who have experienced maltreatment.

Although cognitive treatment approaches were the most widely researched and utilized, other treatment approaches were used and found to be successful in addressing the effects of maltreatment on children. There is a vast body of research supporting social skills instruction in schools (e.g., Gresham et al., 2006; Lewis et al., 2010). However, when considering family treatment approaches, it is critical to move beyond traditional family therapy in order to make it applicable in the school setting. Conjoint Behavioral Consultation (CBC) is a method for establishing a partnership between families and schools, involving families in the educational processes, and using the parent-teacher partnership to support the struggling student (Sheridan et al., 2012). This
partnership includes inviting families to actively participate in educational decision making and planning for their child. Consequently, more research is needed on the effectiveness of a partnership between the school and family and the impact this has on mitigating the effects of maltreatment.
REFERENCES


## APPENDIX A

Table A1

<table>
<thead>
<tr>
<th>Authors</th>
<th>Type of Maltreatment</th>
<th>Setting</th>
<th>Study Design</th>
<th>Treatment Approach</th>
<th>Treatment Length</th>
<th>Outcome Measures</th>
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<tr>
<td>2. Cohen et. al (2005)</td>
<td>Sexual Abuse</td>
<td>Clinic (implied)</td>
<td>RCT</td>
<td>Cognitive: TF-CBT and NST</td>
<td>12 treatment sessions, 6, 12 month follow ups</td>
<td>TSCC, STAIC, CDI, CSBI, CBCL</td>
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<td>5. Deblinger et. al (2011)</td>
<td>Sexual Abuse</td>
<td>Clinic (implied)</td>
<td>Study</td>
<td>Cognitive: TF-CBT with and without TN</td>
<td>8 sessions with no TN, 8 sessions with TN, 16 sessions with no TN, 16 sessions with TN</td>
<td>K-SADS, Beck Depression Inventory, CBCL, CSBI, PERQ, PPQ, CDI, Fear, MASC, Shame, WIST</td>
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<td>6. Fantuzzo et. al</td>
<td>Maltreatment</td>
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<td>Study</td>
<td>Social: RPT</td>
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<td>Design</td>
<td>Cognitive Intervention</td>
<td>Follow-ups</td>
<td>Measures</td>
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<td>8. King et al. (2000)</td>
<td>CSA</td>
<td>Clinic</td>
<td>RCT</td>
<td>Cognitive: CBT (child, family, wait list control)</td>
<td>20-50 minute sessions, weekly</td>
<td>ADIS, Fear R-CMAS, CDI, CBCL, GAF, Coping Questionnaire for Sexually Abused Children</td>
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<td>9. Kmett Danielson et al. (2010)</td>
<td>CSA</td>
<td>Clinic</td>
<td>RCT</td>
<td>Family: Risk Reduction through Family Therapy</td>
<td>Weekly sessions, 3 and 6 month follow up (average of 23 sessions)</td>
<td>UCLA PTSD Index for DSM-IV, BASC-2, CDI, TLFB, FES Interview</td>
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<td>11. Stubenhort et al. (2010)</td>
<td>Maltreatment Preschool setting</td>
<td>Study</td>
<td>Social: Therapeutic preschool based on attachment-focused treatment (TPS)</td>
<td>12 weeks Pre/post assessment</td>
<td>Battelle Developmental Inventory</td>
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<td>12. Turner et al. (2012)</td>
<td>Child Trauma</td>
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<td>Study</td>
<td>Family: SSNR</td>
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<td>JVQ, Parenting Styles and Dimensions Questionnaire CPIC (2)</td>
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<td>Duration</td>
<td>Outcome Measures</td>
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<td>13.</td>
<td>Van der Oord et al (2010) Child Trauma Outpatient clinic Cognitive: Cognitive Behavioral Writing Therapy</td>
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APPENDIX B

Table A2

<table>
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<tr>
<th>Authors</th>
<th>Total Participants</th>
<th>Age</th>
<th>Gender</th>
<th>Diagnosis</th>
<th>Living Arrangement</th>
<th>Method of Joining</th>
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- 20 PTSD
- 16 anxiety
- 7 GAD
- 9 specific phobia
- 8 SAD
- 3 PDD, ADHD, or ODD