SECONDARY TRAUMATIC STRESS AND THE FOSTER PARENTING EXPERIENCE: EXPLORING FACTORS ASSOCIATED WITH THE PREVALENCE OF SECONDARY TRAUMATIC STRESS IN FOSTER PARENTS CARING FOR CHILDREN WHO HAVE EXPERIENCED TRAUMA

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ABSTRACT

SECONDARY TRAUMATIC STRESS AND THE FOSTER PARENTING EXPERIENCE: EXPLORING FACTORS ASSOCIATED WITH THE PREVALENCE OF SECONDARY TRAUMATIC STRESS IN FOSTER PARENTS CARING FOR CHILDREN WHO HAVE EXPERIENCED TRAUMA

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Foster parents are a crucial component of the child welfare continuum of care. Their role can be mixed with both rewards and challenges as they engage in caring for children who have experienced trauma. The role of coming alongside and supporting traumatized populations has been documented to create emotional risks for the helper through this indirect exposure to the traumatic experiences of others. Similar to child welfare professionals, foster parents can be indirectly exposed to traumatic material in their role of caring for traumatized children such that they may be at risk for the development of secondary traumatic stress (STS).

Understanding the prevalence and severity of STS in the foster parent population is important in order to provide a deeper understanding of the emotional impacts associated with this particular caregiving role. Recruiting, training, supporting, and retaining high quality foster parents can lead to better outcomes for foster children. It is important to understand their challenges and the needs of their unique role in order to provide support to those who have stepped forward to open their homes and hearts to care for vulnerable children.

The purpose of this survey study was to examine the prevalence and severity of secondary traumatic stress [STS] in the foster parent population. The relationship between secondary traumatic stress outcomes and three stressor variables were also examined. Frequency of exposure to traumatic material in the foster parent role, experience in the foster parent role as well as personal trauma history of the foster parent were examined in relationship to STS

outcomes. Additionally, perceived support and self-care were examined to assess their role in impacting STS outcomes in foster parents.

The study surveyed foster parents from four child welfare organizations in Kent County, Michigan. Participants were administered the Secondary Traumatic Stress Scale, as well as a series of questions related to their foster parent role and personal traumatic life experiences. Findings of this study indicated 20% of foster parents reported experiencing moderate to severe levels of STS and 12% of foster parents to be meeting criteria consistent with diagnosis of PTSD as a result of indirect exposure to their foster child's trauma. Findings also indicated that both support and personal trauma history are negatively correlated with STS outcomes. Foster parents who perceive having the support they need in their caregiving role experience lower STS outcomes. Foster parents with a personal history of trauma report lower levels of STS than foster parents who report no personal trauma history.

The findings confirm that the prevalence of STS in the foster parent population is consistent with other helping professional roles. Adequately supporting foster parents in their challenging role may have significant impacts on STS outcomes. Unlike findings in studies of child welfare professionals, a personal trauma history appears to act as a buffer in STS outcomes for foster parents. Understanding the personal impacts associated with the foster parent role can help the child welfare system to more effectively address the challenges and needs of this population. This study provides a beginning foundation in the development of understanding STS in foster parents, however, this subject will require further study.

This dissertation is dedicated to all the foster parents that I have met along my journey. My hope is that this project can, in some small way, give back to them as they have given so much to others.

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Chapter 1

Introduction

Secondary traumatic stress (STS) refers to the notion that an individual, who did not experience a particular traumatic event, has in the course of secondary exposure to another person's direct traumatic experience, developed symptoms of post-traumatic stress (Bride, 2007). STS is generally reported to be a more narrowly defined concept describing the impacts of worker stress in comparison to other concepts such as compassion fatigue, burnout, or vicarious trauma (Sprang, Craig, & Clark, 2011). Bride (2007) indicates that the individual experiencing STS displays symptoms consistent with a post-traumatic stress disorder (PTSD) diagnosis including hyper arousal, avoidance, numbing, and re-experiencing based upon the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association [APA], 2000). According to Figley (1999), STS is "the natural, consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other. It is the stress resulting from helping or wanting to help a traumatized or suffering person" (p. 10). STS is unique in that it focuses specifically on those who do trauma work in comparison to other types of compassionate caregiving professional roles.

Recognition of Secondary Traumatic Stress

Though not a new concept, STS has garnered greater attention in recent years with much of the research occurring in the last 15 years (Elwood, Mott, Lohr, & Galovski, 2011). Revisions to the diagnostic categories of the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association [APA], 2013) created a separate chapter for trauma and stressor-related disorders, highlighting our awareness and deepened understanding of traumatic stress and its pervasive impact on individuals. Post-traumatic stress disorder (PTSD)

was moved from the anxiety disorders category and placed in a new trauma and stressor-related disorders chapter (APA, 2013). Diagnostic criteria for PTSD were also revised and now include additional avenues of exposure to traumatic events. Two of the exposure criteria clearly identify indirect exposure to trauma as potential ways of developing PTSD (APA, 2013). Criterion A3, "Learning that the traumatic event(s) occurred to a close family member or close friend" specifically addresses one form of indirect exposure related to family and friends of individuals who have experienced traumatic events (p. 271). Further clarification is provided that "cases of actual or threatened death must have been violent or accidental" in order for the event to qualify for this form of indirect exposure (p. 271). Criterion A4, "Experiencing repeated or extreme exposure to aversive details of the traumatic event(s)" is the second avenue of indirect exposure identified as means of developing PTSD. Examples of "first responders collecting human remains" and "police officers repeatedly exposed to details of child abuse" are provided to help clarify this form of indirect exposure (p. 271). Additional clarifiers are indicated to identify methods of exposure that do not qualify including *"*exposure through electronic media, television, movies, or pictures, unless exposure is work-related" (p. 271). These added indirect exposure criterion provide further validation of the potentially significant personal impacts associated with secondary exposure to trauma and strengthen our understanding of the STS construct (Jones & Cureton, 2014).

Trauma is an integral part of the human experience. Whether directly, or indirectly, most individuals are likely to be exposed to a traumatic event. In the United States, half of all women and 60% of all men will personally experience a traumatic event at some point in their lives (National Center for PTSD [NCPTSD], 2012). Even with this high number of individuals who personally experience a traumatic event, only seven to eight percent of the general population

will develop significant distress qualifying them for a diagnosis of PTSD (NCPTSD, 2012). Most individuals who experience a traumatic event will recover and resume their daily lives without significant difficulties. While direct trauma exposure is quite prevalent today in the general population, some occupational roles lend themselves to an even greater likelihood of exposure to trauma, both directly and indirectly. The *DSM-5* (APA, 2013), in its prevalence section on PTSD, notes that, "Rates of PTSD are higher among veterans and others whose vocation increases the risk of traumatic exposure (e.g., police, firefighters, emergency personnel)" (p. 276). Levin, Kleinman, & Adler (2014) in reviewing the revised *DSM-5* (APA, 2013) PTSD exposure criteria indicate that the discussion on indirect exposure is quite limited but that it "suggests that therapists and social service workers, as well as legal professionals, such as public defenders, prosecutors, and judges, who regularly encounter crime scene details of homicide and domestic violence, could develop PTSD" based upon secondary exposure to traumatic events (p. 149-150). Researchers have studied a number of professional roles to determine if indirect trauma exposure in their work is related to the development of STS.

Secondary Traumatic Stress in the Literature

Since the concept was coined by Figley in 1995, STS has been studied in a broad range of professional roles that interact with traumatized populations. A variety of instruments have been utilized to measure STS dependent on how the concept is defined. All of these studies utilize instruments which measure STS consistent with symptoms of PTSD diagnostic criteria.

Helping professionals in a variety of contexts have been one area of research. Kintzle, Yarvis, and Bride (2013) surveyed 70 military primary and mental health care providers utilizing the Secondary Traumatic Stress Scale (STSS; Bride, Robinson, Yegidis, & Figley, 2004) and report 8% to be experiencing moderate to high levels of STS. Bride, Hatcher, and Humble (2009)

surveyed 242 substance abuse counselors utilizing the STSS. Findings indicate that 19% of the helping professionals in this study met core diagnostic criteria for PTSD following indirect exposure to their clients' trauma. Slattery and Goodman (2009) studied 148 domestic violence advocates utilizing the PTSD Checklist - Stressor Specific Version (PCL-S; Weathers, Litz, Herman, Huska, & Keane, 1993) and found that 47% of participants met criteria for clinical levels of PTSD related to indirect trauma exposure in their professional roles. A study of social workers found similar results in prevalence of STS. Bride (2007) surveyed 282 licensed masters-level social workers utilizing the STSS and found 15% to be experiencing symptoms consistent with a PTSD diagnosis as a result of secondary exposure to their clients' traumatic experiences. Prevalence rates vary significantly across studies which may be attributed to the diversity in instruments utilized in the research studies, the populations being served, as well as the responsibilities and level of exposure in those professional roles. While a range of prevalence rates are reported in the research on helping professionals, STS does appear to be consistently evidenced at some level across a broad range of helping professional roles working with traumatized populations.

A variety of other occupational roles have been studied as well. Dominguez-Gomez and Rutledge (2009) surveyed 67 emergency room nurses utilizing the STSS and report 33% met diagnostic criteria for PTSD. Nurse midwives were the subjects of another STSS survey. Findings indicate that 36% met diagnostic criteria for PTSD as a result of their professional role experiences. Shah, Garland, and Katz, (2007) surveyed 76 humanitarian aid workers in India utilizing the STSS and report that 8% met diagnostic criteria of PTSD as a result of secondary exposure to trauma.

Criminal justice positions have also been researched in relation to STSS. Hatcher, Bride, Oh, King, and Catrett (2011) surveyed juvenile justice teachers and staff utilizing the STSS. Findings indicate that out of 118 workers, 39% met all 3 criteria for a PTSD diagnosis following indirect exposure to trauma in the course of their work. Also utilizing the STSS, Bourke and Craun (2014) studied law enforcement professionals involved in Internet crimes investigation and report 44% of participants experiencing moderate to severe levels of STS as a result of the indirect exposure to traumatic material in their daily work. Levin et al. (2011) surveyed attorneys and their administrative support staff utilizing the Impact of Events Scale-Revised (IES-R; Weiss & Marmar, 1997) and the Professional Quality of Life Scale (ProQOL; Stamm, 2010). Findings indicate 11% of attorneys to be experiencing symptoms consistent with PTSD. Support staff did not demonstrate significant levels of secondary stress.

Non-professional roles have also been studied such as spouses and caregivers of traumatized populations. Gawrych (2010) surveyed wives of firefighters involved in 9/11 events utilizing the IES-R (Weiss & Marmar, 1997) and report that 21% of firefighter wives and significant others met criteria for STS consistent with PTSD diagnostic criteria. Findings indicate that 21% of firefighter wives and significant others met criteria for secondary trauma. Ahmadi, Azampoor-Afshar, Karami, and Mokhtari (2011) surveyed 120 spouses of combat veterans with PTSD utilizing the Mississippi Scale for Combat-Related PTSD (Keane, Caddell, & Taylor, 1988). All of the spouses displayed moderate to severe levels of STS symptoms. Moderate STS symptoms were found in 49% of participants and severe symptoms were found in 51% of participants. In addition to helping professional roles, there is clear evidence of an interest in understanding the prevalence and severity of STS in a variety of occupational contexts as indicated by this growing body of research. STS appears to be consistently evidenced across a

broad spectrum of professional and non-professional roles engaged with traumatized populations.

Child Welfare and Secondary Traumatic Stress

In an effort to develop a better conceptualization for this research study on foster parents and STS, a detailed review of the literature on child welfare and STS was conducted. Child welfare has also been noted as an occupation where trauma exposure is highly prevalent (Sprang et al., 2011). Child welfare professionals often encounter trauma on a daily basis through the lives of those with whom they work. In 2014 alone, there were 3.6 million reports of suspected child abuse and neglect in the United States representing 3.2 million children (Child Maltreatment, 2016). Of these children, 702,000 were substantiated as victims of abuse or neglect. That equates to 9.4 victims for every 1000 children in the United States (Child Maltreatment, 2016). Of children placed in the foster care system, the Department of Health and Human Services reports rates of trauma exposure for this population group at a significantly higher rate (Child Maltreatment, 2016). Ninety percent of children in foster care are reported to have experienced a traumatic event (Burwell, 2013). In Michigan, the rate of substantiated abuse and neglect victims for 2014 was reported at 14.7 per 1000, much higher level than the national average (Kids Count, 2016).

Child welfare professionals are subsequently exposed to trauma on a frequent basis, both directly and indirectly in the course of their daily work with traumatized children. Given the tremendous exposure to traumatic material, child welfare work has been elevated by some to be considered an "occupational hazard" due to the intensity of the work and the resultant emotional impacts on the workers (Conrad & Keller-Guenther, 2006; Pryce, Shackelford, & Pryce, 2007; Sprang et al., 2011).

The World Health Organization (2016) identifies negative outcomes associated with poor working conditions in a given occupational role such as "cancers, accidents, musculoskeletal diseases, respiratory diseases, hearing loss, circulatory diseases, stress related disorders and communicable diseases" (para. 1). As a result of engaging in a particular occupational role, certain factors associated with that role increase the likelihood that an individual will experience "hazards" on the job which can impact the physical and/or emotional health of the employee. Certain types of occupations with higher physical or emotional risk factors are then referred to as occupationally hazardous. Due to the emotionally stressful work and the resultant impacts on workers, the National Child Traumatic Stress Network (2011) has indicated that, "The development of secondary traumatic stress is recognized as a common occupational hazard for professionals working with traumatized children" (NCTSN, 2011, p. 2).

Though limited in number and scope, research studies of STS and child welfare professionals have consistently indicated the prevalence of STS in this occupational role. Cornille and Meyers (1999), in surveying child protective services workers utilizing the Brief Symptom Inventory (BSI) and the Impact of Events Scale – Revised (IES-R), found up to 37% of their sample to be "experiencing clinical levels of emotional distress associated with STS" (p. 15). Bride, Jones, and MacMaster (2007), utilizing the STSS, studied 187 child protective services workers and found 34% to be experiencing symptoms consistent with a *DSM-IV-TR* (APA, 2000) PTSD diagnosis following secondary exposure to trauma. Caringi and Hardiman (2012) also found significant levels of STS in surveying 103 child protection workers utilizing the STSS, reporting over 50% of workers met criteria for PTSD. Each of these studies utilized measures conceptually linking STS to PTSD diagnostic criteria.

Other child welfare studies utilized measures which addressed both compassion fatigue (CF) and STS. Nelson-Gardell & Harris (2003) studied STS in 166 child protective services workers, supervisors, and managers utilizing the CTQ (Childhood Trauma Questionnaire) and the Compassion Fatigue Self-Test for Psychotherapists (CFST) and found linkages between a personal trauma history of abuse and neglect and the increased likelihood of the development of STS. Sprang et al. (2011) studied STS outcomes in 669 helping professionals utilizing the ProQOL and concluded that "Identifying as a child welfare professional was a robust predictor of experiencing STS beyond other predictor variables" (p. 161). Also utilizing the ProQOL, Salloum, Kondrat, Johnco and Olson (2015) surveyed 104 child welfare case managers and supervisors and found 29% to be experiencing high levels of STS.

Qualitative studies also provide evidence of STS in child welfare professionals. Stone (2011), in a qualitative dissertation study, utilized a phenomenological approach to explore the mental health capacity of 9 foster care caseworkers. Findings of the study support prior research on STS, indicating that foster care caseworkers were primarily impacted by intrusive thoughts of their work. Genovese (2013), in a qualitative dissertation study utilizing individual interviews of 16 child welfare workers, found workers to be reporting symptoms of STS but perceived this to result from work related stressors rather than exposure to client trauma. Additionally, Dane (2000), in qualitative focus group studies of 10 child welfare workers from one organization, found STS to be one of the five key themes that emerged as areas of concern for workers.

Recent research and new knowledge on the prevalence of STS in child welfare professionals have spurred greater interest in the subject, as well as some efforts to address this issue. The National Child Traumatic Stress Network (NCTSN, 2011) has developed publications and webinars to create awareness and understanding of STS as well as to provide resilience

building and intervention strategies. The Administration for Children's Services (2011) in collaboration with New York University created the Resilience Alliance Project to promote resilience and address STS in child protective services workers in New York City. Conrad (2012) created the Secondary Trauma Prevention Project in Colorado to provide psychoeducation and emotional support to child protection workers. A specific instrument has been created to more effectively measure the prevalence and severity of STS in helping professionals (Bride, Robinson et al., 2004; Stamm, 2010). Hazard pay or high risk pay has been implemented for child protective services workers in some areas to account for this stressful and potentially dangerous work. Michigan's recently implemented MiTEAM child welfare case practice model includes the incorporation of secondary trauma in its logic model to address improved support of child welfare workers (National Child Welfare Workforce Institute [NCWWI], 2015). The Michigan Department of Health and Human Services (MDHHS; 2014) has recently implemented a secondary trauma pilot program for child welfare workers in 12 counties focusing on psychoeducation and support related to STS. These recent efforts have begun to address the emotionally challenging work of child welfare professionals as a result of STS research findings.

Foster Parents and Secondary Traumatic Stress

One crucial population within the child welfare service delivery system has not been targeted in STS research studies. Foster parents, being a part of the child welfare system, come into direct contact with children who have often experienced significant traumatic events. They play a unique and very different role within the child welfare system which often involves both professional and very personal capacities. Foster parents are charged with providing the day to day care for the child as they serve in a substitute parental capacity. They are also often involved

in advocating for and supporting the child (Chipungu & Bent-Goodley, 2004). Additionally, foster parents are encouraged to be involved in a professional context such as attending court hearings and organizational meetings or peer mentoring and training roles (Chipungu & Bent-Goodley, 2004). Buehler, Rhodes, Orme, and Cuddeback (2006) define five essential role functions of foster parents which are addressed in foster parent PRIDE preservice trainings and involve both personal and professional contexts including: protecting and nurturing children, meeting developmental needs, supporting relationships between children and families, connecting children to safe and lasting relationships, and working as members of a professional team. As a result of these multiple roles, foster parents find themselves in a very different child welfare capacity than child welfare professionals.

While the foster parent role is distinctively different from that of child welfare professionals, they are living and interacting with the same population of abused and neglected children that child welfare investigators and case managers work with in their professional roles. The American Academy of Pediatrics notes that "Virtually all children in foster care have been abused and/ or neglected" (Forkey, Garner, Nalven, Schilling, & Stirling, 2015, p. 2). Burwell (2013) indicates that at least 90% of children who enter foster care are reported to have experienced a traumatic event. Given the prevalence rates of trauma among foster children, foster parents are highly likely to find themselves in a position of living with and caring for children who have experienced trauma. Foster parents may hear firsthand, the stories of the traumatic experiences of the children in their care. They may also witness the physical and psychological impacts of those traumatic experiences on the children placed in their homes. Sometimes they can also find themselves helping the child to recover from physical injuries following removal from abusive or neglectful situations. They may have children in their care where every day, they are reminded of the trauma the child endured as they see the lasting

physical and emotional scars that were inflicted on the child. As a result of indirect exposure to traumatic material within the foster parent role, the potential exists for similar STS impacts in this population that has been observed in child welfare and helping professionals.

Though the potential exists for STS in the foster parent population, a review of the literature identified no peer-reviewed articles related to STS and foster parents. A search of the Published International Literature on Traumatic Stress (PILOTS) Database, a worldwide database addressing PTSD as well as other types of traumatic stress and consequences of exposure to traumatic events (NCPTSD, 2016) with key words "secondary trauma*" and "foster parent*", "secondary trauma*" and "foster care" as well as "secondary trauma*" and "child welfare" uncovered zero articles related to foster parenting and STS. A search of the ProQuest database with the same key words also found zero articles related to STS and foster parents. This lack of literature on STS and foster parenting demonstrates a significant gap in the literature of an important aspect of child welfare service delivery that may also be experiencing STS impacts.

Statement of the Problem

Foster parenting is a unique and crucial role within the child welfare system delivery of care. Their role plays a critical part in the stability and care of children while in out of home placement. Much of the child's success throughout the child welfare process is thought to rest on the physical stability and family care they receive while in out of home placement (Harden, 2004; Hussey & Gou, 2005; Rubin, O'Reilly, Luan, & Localio, 2007).

With over 415,000 children in foster care in the United States today (Adoption and Foster Care Analysis and Reporting System [AFCARS], 2015), and approximately 13,000 in Michigan (Michigan Department of Health and Human Services [MDHHS], 2016) there continues to be a significant need for foster parents to care for these children. Foster parent retention has been

noted as a concern and challenge of the child welfare system for many years (Chipungu & Bent-Goodley, 2004; Denby, Rindfleisch, & Bean, 1999; Rhodes, Orme, & Buehler, 2001). With dropout rates reported between 30-50%, Christian (2002) notes poor retention of foster parents has created a crisis in the child welfare system in the ability to provide quality care for foster children. Gibbs and Wildfire (2007) note in their longitudinal study that 47-62% of foster parents quit within one year of the first child placement in their home.

Foster care placement instability has also been linked to poor well-being outcomes for children in care. Rubin et al. (2007) found that placement instability alone was related to a 63% increase in behavior problems of the foster children in their study demonstrating the significant need to retain quality foster parents. Hussey and Guo (2005) found an increase in psychiatric symptoms associated with the number of placement changes noting that "placement instability places the well-being of children at heightened risk" (p. 485). Harden's (2004) findings concur that there is a relationship between foster care placement instability and poor developmental outcomes as well as poorer academic outcomes and longer lengths of stay in foster care. The stability and retention of quality foster parents is a vital component of a healthy and successful child welfare system.

While the need continues to exist for stable foster care providers, the role of foster parents has gone through some changes since the early placing days of the Orphan Train era. Foster parents today are often expected to participate in a specified amount of training prior to having a child placed in their care. In Michigan, it is required that foster parents complete 12 hours of PRIDE (Parent Resources for Information Development and Education) training prior to having a foster child placed in their care and 12 additional hours of training within 18 months following their initial licensure (MDHHS, 2016). PRIDE is a widely used training curriculum

designed to prepare new foster parents for their role in caring for foster children (Child Welfare League of America [CWLA], 2013). The PRIDE curriculum focuses on five core competencies: "protecting and nurturing children, meeting children's developmental needs and addressing their delays, supporting relationships with birth families, connecting children to safe, nurturing relationships intended to last a lifetime, and working as a member of a professional team" (CWLA, 2013). Across the United States, there are varying requirements for both the amount and type of foster parent training required (Dorsey et al., 2008). Cooley and Petren (2011), in their study of foster parent competency and training, find that there isn't a good understanding of how foster parent training should be offered or what content should be included in the trainings. However, there is clearly a greater emphasis on foster parent training today than in years past.

Chipungu and Bent-Goodley (2004) define the current foster parent role with much more complexity than in years past. The foster parent is noted to have many responsibilities including aspects such as providing for day-to day needs, responding to emotional and behavioral needs, transporting and participating in counseling, court, medical appointments, advocacy, arranging visitations, communicating with agency staff, involvement in service planning for the child and mentoring birth parents. Barth et al. (2008) describes a "tripartite role" of foster parenting: working with birth parents and case workers toward reunification, supporting permanency, as well as helping the foster child to grow developmentally. Hudson and Levasseur (2002) take a bolder perspective of the changing role definition of the foster parent. They note that it is no longer substitute care, but rather, supplemental care and that foster parenting is not in any way replacing the birth parent, just supplementing their role for a brief period of time. Hudson and Levasseur (2002) state this "inclusive care" adds a new dimension to the foster parent role that is often more difficult and stressful than the clear cut and limited expectations of the past (p. 855).

By definition, the foster parent role has morphed into something much different today than in years past involving much more depth and complexity. The resultant impacts on foster parents in this changing complex role require continued investigation.

Given the changing and increasingly complex role definitions, foster parents have noted a number of concerns and challenges within their role. Role confusion in terms of expectations and responsibilities of the foster parent has been noted to be of concern, particularly in determining foster parent involvement within the foster care organization and the child welfare system (Brown & Calder, 2009; Chipungu & Bent-Goodley, 2004). Adequate support, training, and resources from the organization, family, and community have also been noted to be a challenge for foster parents in their role (Chipungu & Bent-Goodley, 2004; Rhodes et al., 2001). Factors such as physical and emotional stressors associated with the foster parent role have also been noted to be a concern including managing the child's behavior as well as interactions with biological parents (Rhodes et al., 2001).

While research studies on foster parenting have addressed a number of issues including retention, role definition, and role challenges, few studies appear to have addressed the personal impacts of the foster parent experience and no published studies have addressed STS in foster parents. MacGregor, Rodger, Cummings, and Leschied (2006), in their study of foster parent needs, indicate that foster parents identified a need for emotional and physical support in their role. Processing losses when foster children leave their homes, dealing with feelings of being overwhelmed with difficult cases and not knowing how to help, and not having someone to talk to who understands from a personal perspective were all noted to be personal challenges and impacts of their role. Whenan, Oxlad, and Lushington (2009) addressed foster parent well-being. Findings indicated that the temporary nature of the placement, attachment difficulties, and

behavioral struggles of the foster child were all likely to increase the stress and ultimate well-being of foster parents. Rosenwald and Bronstein (2008) in their foster parent focus groups also identified some personal impacts of foster parenting. Common themes that emerged included marital relationship strain, angst regarding the impacts of fostering on their own biological children, feeling as if they were living more fearfully, and feeling as if they were on an emotional roller coaster as a result of the child's behavior and struggles. Though limited in scope, it is evident through these few research studies that foster parents experience some very personal impacts associated with their foster parent role.

Research studies of STS in child welfare investigators and case managers have consistently found evidence of STS with prevalence rates reported between 29 to 50% percent in this population group and one study reporting up to 75% of this group experiencing at least moderate levels of STS (Bride, Jones, & MacMaster, 2007; Caringi & Hardiman, 2012; Conrad & Keller-Guenther, 2006; Salloum et al., 2015). Juvenile justice teachers and staff working with traumatized youth were also noted to be experiencing significant levels of STS with 39% meeting criteria for PTSD through secondary exposure to the youths' trauma (Hatcher et al., 2011). The NCTSN (2011) indicates that, "Any professional who works directly with traumatized children, and is in a position to hear the recounting of traumatic experiences, is at risk of STS" (p. 2-3).

Studies of child welfare professionals have consistently reported at least ¼ of the workers to be experiencing clinically significant levels of STS. This high level of distress is associated with the role of working with traumatized children. Research findings have helped to support the development of trainings and practice models to prevent as well as intervene to address STS impacts in professionals working in child welfare. Working with traumatized children has STS

impacts on others even beyond child welfare workers including attorneys, juvenile justice workers, law enforcement, and counselors. Out of all the studies on STS in the child welfare arena, foster parents are one population group that has not received attention in the literature on STS to date. Yet, foster parents play a crucial role in the child welfare system delivery of care. Their role is a central stabilizing force for a child in out of home placement. Our knowledge of poor child outcomes linked to placement changes highlights the importance of stability in this caregiving role. Having knowledge of the research on child welfare professionals and STS can prove to be useful in considering how foster parents might also be impacted by indirect exposure to their foster child's trauma. However, without research on STS specific to foster parents and their unique role, direct applications cannot be made. Given the growing body of knowledge on the evidence of STS in child welfare professionals as well as the potential resultant impacts on retention and emotional health, it is apparent that research on foster parents and STS is a much needed area of research.

Purpose of the Study

The purpose of this study is to develop greater knowledge of STS specific to the foster parents in order to begin to address the gap in the literature that exists on this population. The notion of STS is often included in documents that guide practice, training, and intervention, as well as anecdotes about particular cases (Conrad, 2004; Klamm, Klamm, & Peterson, 2012; National Child Traumatic Stress Network [NCTSN], 2010; Perry, 2003). A quick Google search of STS and foster parents reveals a host of foster and adoptive parent groups, personal blogs, articles, as well as professionals and organizations referring to STS in foster parents. It appears to be an area of concern to both foster parents and professionals in the field. STS research from

other areas of study have seemingly been applied to the foster parent population without supporting evidence for the generalization of those findings across these population groups.

STS and foster parenting is an important area of study due to this apparent absence of published research on the subject of STS with this population. Elwood et al. (2011) expressed significant concern in providing STS training to helping professionals without adequate evidence of its existence. Ineffective use of limited resources, potential negative outcomes, as well as the potential for a self-fulfilling prophecy are all noted as concerns in implementing broad STS prevention and intervention programs without substantiated research indicating a prevalent need (Elwood et al., 2011). Given that foster parents are currently being provided with information and training on STS and its impacts, it is important to determine the prevalence of STS in this population as well as to develop a clearer understanding of this concept in relation to this specific child welfare population. Research on STS and foster parenting can then help to provide more effective training content and resources to this population.

This study begins with an exploration of the prevalence and intensity of STS in foster parents as a result of indirect exposure to trauma in caring for foster children who have experienced traumatic events. In order to gain a deeper understanding of severity of STS in foster parents, this study also explores factors which may impact STS outcomes. Three stressor variables identified in child welfare STS research as having a potentially significant impact on STS outcomes will be studied (personal trauma history, role experience, and frequency of exposure to traumatic material). The study will explore three additional variables reported in child welfare literature (research and anecdotal) to have a buffering impact on STS outcomes (support, emotional preparedness and self-care).

It is anticipated that this study will provide greater understanding of the prevalence and intensity of STS in foster parents as well as an understanding of factors which contribute toward or potentially buffer the severity of STS in foster parents so that research informed support, resources, and education can be provided to this population. To this end, this study addresses three specific research questions.

Research Questions

Stress process theory provides a particularly useful foundation for this study, and guides articulation of the research questions, which begin with an inquiry into the prevalence of STS in foster parents caring for traumatized children. According to Pearlin (1989) the stress process has three domains: stressors, stress mediators (which, from this point forward, will be called stress buffers for the purposes of this research study), and stress outcomes. Pearlin's (1989) stress process theory emphasizes the importance of understanding the role of social factors on stress, the personal and social resources available in times of stress, and the resultant impacts of stressors on individuals. Each of these domains is represented in this study, with variables that are drawn from the literature on closely allied professions and caregiving, and pertain to the foster parent role.

Prior research outcomes on the stressors associated with child welfare professional roles provide support in studying similar foster parent stressors in caring for traumatized children. Stressors assessed in this study include exposure to the foster child's traumatic experiences, (Bride, Jones, & MacMaster, 2007; Cornille & Meyers, 1999), personal traumatic life experiences of the foster parent (Bride, Jones, & MacMaster, 2007; Nelson-Gardell & Harris, 2003; Pryce et al., 2007), and years of experience in the foster parent role (Hensel, Ruiz, Finney, & Dewa, 2015; Salloum et al., 2015).

This study also includes the stress buffering domain by incorporating buffering variables that are thought to positively or negatively moderate the development of STS. Stress buffers in this study include perceived support (such as personal and social resources available and utilized) (Bride, Jones, & MacMaster, 2007; Caringi & Hardiman, 2012; Dane, 2000), perceived emotional preparedness (such as coping skills, training, capacities) (Caringi & Hardiman, 2012; Caringi, Lawson, & Devlin, 2012; Dane, 2000), and perceived self-care (such as physical, emotional, and spiritual activities to maintain health and wellness) (Conrad, 2004; Dane, 2000; Manning-Jones, de Terte, & Stephens, 2016).

This study also seeks to gain an understanding of the final domain in stress process theory, stress outcomes. Prevalence and severity of STS symptoms will be analyzed in relationship to the stressors and stress buffers outlined above to gain an understanding of the combination of variables that best explain the variance in STS outcomes in foster parents.

The research questions have been informed through prior STS studies of child welfare and mental health professionals who work with traumatized populations as well as through the principles of stress process theory. The research questions addressed in this study are as follows:

1. What is the prevalence and severity of secondary traumatic stress for foster parents who care for traumatized children?
2. What is the association between selected stressors (number of years of foster parenting, exposure to foster child's traumatic events, and personal foster parent trauma history), selected stress buffers (perceived support, perceived preparedness, and perceived self-care), and the severity of secondary traumatic stress in foster parents?

3. To what degree does a combination of stressors and stress buffers explain the severity of secondary traumatic stress in foster parents?

For detail on the analyses used to answer these questions, please see the analytic model for research questions in Appendix A.

Contributions to the Field of Social Work

Child welfare has been a subject of concern for social workers since the profession's beginning times (National Association of Social Workers [NASW], 2005). Children have been recognized as a vulnerable population group needing advocacy and effective service provision, particularly those who have been identified as being at risk of or having experienced abuse or neglect. The development and maintenance of an effective child welfare system includes a solid knowledge and understanding of the needs of those who step in to provide substitute or supplementary care for children relinquished to the custody of the state. The literature reports that foster parents are difficult to recruit and to retain, often leaving a shortage of homes for children in care (Rehnquist, 2002; Rhodes, Orme, Cox, & Buehler, 2003). Research also indicates that foster parents report many challenges and difficulties in their role of caring for abused and neglected children (Brown & Calder, 2009; Chipungu & Bent-Goodley, 2004). Understanding the challenges specific to the foster parent experience can be crucial components of efforts to increase stability and development of a successful child welfare service system.

Social workers have long been positioned as advocates for vulnerable children and families through their micro level work as well in policy advocacy, program development, and research in the field of child welfare (NASW, 2005). In alignment with stress process theory, social workers recognize the role of the social environment in the lives of individuals and families as they face challenges and difficult life experiences. Social work intends to understand

and intervene from this broader, holistic perspective. The NASW (2013) standards of child welfare practice highlight that "social workers shall also assess aspects of personal, familial, and social factors that can negatively affect a family's resources to care for its members" (p. 19-20). While this is primarily referring to the biological family, these standards of care can also be applied to the foster care families within the system. Given the mean length of stay of 20.8 months for children in foster care, the word "temporary" can take on new meaning for foster children and foster families (AFCARS, 2015). With this in mind, social work can help support and strengthen child welfare service delivery by recognizing and valuing the challenges of each aspect of this system of care, including foster parenting.

Research and statistics in general on foster parents has been scarce through the years in comparison to other aspects of the child welfare system (Grimm & Darwall, 2006). Social work can play a pivotal role in furthering the knowledge of this crucial population within the child welfare system of care. In understanding the personal impacts faced by foster parents in caring for abused and neglected children, social workers can more effectively engage in policy and program development efforts. Anecdotal reports and practice wisdom suggest evidence for the existence of STS in the foster parent population (Conrad, 2004; Klamm et al., 2012) and STS content is incorporated in influential foster parent training curriculums (NCTSN, 2010; Perry, 2003). There is evidence of STS in other populations working in the child welfare system – protective services workers (Bride, Jones, & MacMaster, 2007), child welfare workers (Caringi & Hardiman, 2012; Cornille & Meyers, 1999; Sprang et al., 2011) and juvenile justice staff (Hatcher et al., 2011). Given the lack of published research that establishes the prevalence of STS in the foster parent population, this study provides a foundation for development of an

evidence informed understanding of STS and the foster parent experience, while also supporting a population that is neglected in the research literature.

Chapter 2

Review of the Literature

A review of the literature in preparation for this research study consists of several components. First, concepts utilized to address the impacts associated with indirect exposure to trauma are reviewed, including burnout, compassion fatigue, vicarious trauma, and STS. Second, a review of changes in PTSD diagnostic criteria in the *DSM-5* (APA, 2013) is provided given the recent revisions to this diagnosis as well as its identified relationship to the STS construct in this research study. Third, stress process theory is reviewed in relationship to its application to this study's conceptualization and research model development. Next, a review of the literature on STS in child welfare and foster parents is provided to assess the current state of knowledge of STS in the study population as well as related populations. Finally, a literature review is conducted of the six identified variables included in this research study to develop knowledge of their association with STS outcomes. The literature review will close with a summary of key findings and applications to this research study.

Concepts of Indirect Exposure to Trauma

A variety of concepts have been utilized to describe the impacts on those who work with traumatized individuals. Burnout (Maslach & Jackson, 1981), compassion fatigue (Figley, 2002), vicarious trauma (McCann & Pearlman, 1990), and secondary traumatic stress (Figley, 1995) have all been referred to in the literature to explain the emotional impacts of caring for and working with traumatized individuals. There has been a melding of these concepts, often without clear delineation of what is meant by each term as well as a lack of clarity on the symptoms consistent with each concept (Newell & MacNeil, 2010; Pearlman, 2012). Research studies have offered varying definitions of these concepts with inconsistent use of measurements dependent

on the interpretation of the identified construct, making broad analyses of literature findings more difficult to interpret (Elwood et al., 2011). Though there are varying definitions in the literature, some key themes have emerged to more clearly define each construct.

Burnout. Burnout is a more general concept that has been frequently utilized to refer to the worker's thoughts, feelings, and behaviors associated with their employment position. Maslach and Jackson (1981) defined burnout as "a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do 'people-work' of some kind" (p. 99). According to Maslach and Jackson (1981) burnout is identified as having three key aspects including emotional exhaustion, negative and cynical attitude about the work or clients, and negative feelings about self in relation to work. Burnout has been noted to occur in a broad array of employment positions though many link this concept closely to work in the helping professions. Malakh-Pines, Aronson, and Kafry (1981) define burnout as that of mental and physical exhaustion which occurs as a result stressful interactions with other people. Burnout can also be associated with poor working conditions, long hours and lower compensation, as well as workers feeling unsupported and unappreciated (Newell & MacNeil, 2010). Burnout is not regarded as specific to working in a helping professional role nor specifically related to working with traumatized populations.

Compassion fatigue. Compassion fatigue (CF) is often referred to as a broader concept to encompass the cumulative personal impacts associated with engaging in a helper role (Newell & MacNeil, 2010). A common phrase related to compassion fatigue is "the cost of caring" (Figley, 2002). According to Figley (2002), "The very act of being compassionate and empathic extracts a cost under most circumstances. In our effort to view the world from the perspective of the suffering, we suffer" (p. 1434). This compassionate care, then results in a reduced capacity or

desire to continue to engage in a helper context (Figley, 2002). Stamm (2010) identifies CF as an overarching concept which incorporates the impacts of STS as well as impacts related to burnout as a result of working with people who have experienced or are experiencing difficult life situations. Adams, Boscarino, and Figley (2006) define CF as "the formal caregiver's reduced capacity or interest in being empathic or 'bearing the suffering of clients' and is 'the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced or suffered by a person'" (p. 104). CF is also noted to be the result of the cumulative effects on the helper in working within difficult and emotional circumstances over an extended period of time (Newell & MacNeil, 2010). CF has been frequently used interchangeably with STS and Figley (1995) notes that CF can be substituted for STS. There is some indication in the literature, however, that CF can be delineated from STS in that CF relates more specifically to helping professions or those engaged in a helper role while STS has been utilized with a variety of populations (Elwood et al, 2015).

Vicarious trauma. Vicarious trauma (VT) generally is noted to address the internal cognitive changes that occur in an individual's perception about others and the world as a result of their ongoing work in a helping professional role (Newell & MacNeil, 2010). Rooted in constructivist self-development theory, vicarious trauma addresses changes in the helper's personal reality and core beliefs as a result of ongoing work with traumatized populations (Jankoski, 2010). The lens with which individuals view the world has changed as a result of their work and can subsequently negatively impact their interactions with others and their environment. Canfield (2005) notes that changes occur in both the individual's personal and professional life and that this change is "permanently transformative" (p. 87). When a helping professional engages in ongoing contact with distressed and suffering populations, their personal

and professional lives are affected such that changes can be observed in "affect tolerance, fundamental psychological needs, deeply help beliefs about self and other, interpersonal relationships, internal imagery, body experiences, and physical presence in the world" (p. 88). While VT has often been noted to lead to STS symptoms, this is not a required or necessarily expected condition of the construct (Elwood et al., 2015). Similar to CF, the impacts of VT are thought to be cumulative over time in the helping professional role.

Secondary traumatic stress. Secondary Traumatic Stress (STS) specifically refers to the notion that an individual, who did not experience a particular traumatic event, has in the course of secondary exposure to another person's direct traumatic experience, developed symptoms of post-traumatic stress (Bride, 2007). STS is generally reported to be a narrowly defined concept of occupational stress with a clear and specific set of symptoms (Sprang et al., 2011). Figley (1995) defined STS as "a syndrome of symptoms nearly identical to PTSD" (p. 21). Figley (1995) noted that STS is "the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other – the stress resulting from helping or wanting to help a traumatized or suffering person" (p. 21). In some respects, it was considered to be an expected result of working amidst trauma. According to Bride (2007), the individual experiencing STS displays symptoms consistent with a PTSD diagnosis (APA, 2010) including hyper arousal, avoidance and numbing, and re-experiencing as a result of indirect exposure to the trauma of another person. Rather than PTSD, Figley (1995) recommended that there be two diagnoses: primary traumatic stress disorder and secondary traumatic stress disorder, indicating that both are similar in outcome but differ in form of inception. Unlike CF, VT, or burnout, STS is noted to potentially have a rapid and unanticipated onset following indirect exposure to traumatic material. Some, however, include aspects of compassion fatigue in defining STS and

include the ongoing cumulative effects in the "cost of caring" as an added dimension of STS (Figley, 1995; Elwood et al., 2015). Stamm (2010) on the other hand, identifies STS as a subset of CF. As such, STS and burnout result in the development of the overarching CF construct. Recent *DSM-5* (APA, 2013) revisions to the PTSD diagnostic criteria have now clearly included some forms of indirect exposure to trauma as a means of developing PTSD. These revisions provide further validation of the significant personal impacts associated with secondary exposure to trauma and help strengthen our understanding of the STS concept (Jones & Cureton, 2014).

STS has taken on a variety of definitions over time following Figley's (1995) early writings which incorporated aspects of both CF and PTSD. Figley (1995), consistent with a diagnosis of PTSD, initially identified three key aspects of STS: re-experiencing, avoidance and numbing, and arousal. Figley (1995) conceptualized STS as synonymous with compassion fatigue and he is noted to use these terms interchangeably. The importance of understanding the cumulative effects of working with traumatized individuals or in crisis situations for an extended period of time as an additional factor in the development of STS was also noted, indicating a linkage of CF and STS.

Stamm (1997) defined STS as a broad overarching term encompassing CF, VT, and aspects of countertransference. Stamm conceptualized STS as a term to describe the range of impacts of working with traumatized populations and included a broader array of helpers to be potentially experiencing STS impacts such as teachers and health care professionals. Stamm also noted the potential for non-professionals, such as volunteers, to experience STS. In more recent years, Stamm (2010) indicates further research has uncovered that STS, VT, and CF are not interchangeable. Stamm's (2010) ProQOL instrument conceptualizes STS as one of two subsets of the overarching concept of CF (the other subset being burnout) and indicates that STS is "an

element of compassion fatigue" that is "about work-related, secondary exposure to people who have experienced extremely or traumatically stressful events" (p. 13). Stamm (2016) indicates that one could potentially receive a clinical diagnosis of PTSD as a result of the impacts of CF in working with traumatized individuals. Stamm (2010) does not identify STS as being directly indicative of the development of PTSD. Negative effects of STS according to Stamm (2010) include "fear, sleep difficulties, intrusive images, or avoiding reminders of the person's traumatic experiences. Though the effects of STS are not directly equated to PTSD, the negative effects listed are closely aligned with *DSM IV-TR* (APA, 2000) PTSD diagnostic criteria.

Bride, Robinson et al. (2004) define STS in alignment with Figley (1995) but also include a clearly defined set of symptoms associated with the construct. STS is characterized by "intrusion, avoidance, and arousal symptoms resulting from indirect exposure to traumatic events by means of a professional helping relationship with a person or persons who have directly experienced traumatic events" (Bride, Robinson et al., 2004, p. 3). Through the course of their work, helping professionals are exposed to the "vivid imagery" of clients' traumatic events as they help them to work through their experiences (Bride, Hatcher, & Humble, 2009, p. 97). It is this vivid indirect exposure that can result in STS. As in PTSD, cumulative exposure to stress is not necessarily required, nor are the cumulative effects of caring (as in CF) needed to develop STS. From this perception of the construct, cumulative exposure could be a contributing risk factor in the development of STS rather than observed as the same construct. Bride, Robinson et al. (2004) in the development of the Secondary Traumatic Stress Scale (STSS), conceptualize STS as being congruent with the criteria for a PTSD diagnosis in the *DSM-IV-TR* (APA, 2000) through work related indirect exposure to traumatic events. Based upon this conceptualization, STS is defined as a separate, stand alone, construct, separate from CF, VT, or burnout. The

STSS, developed and validated by Bride, Robinson et al. (2004), measures STS from the conceptualization of its alignment to PTSD criteria. Based upon this conceptualization, Bride (2007) addresses the notion that those working directly with traumatized individuals in a variety of capacities may be at risk for the development of PTSD through secondary exposure.

Given the changing definitions of STS over time as well as the current varying conceptualizations of STS, there continues to be a need for greater clarity regarding how STS as well as CF, VT, and burnout should best be defined. For the purposes of this research study, STS will be conceptualized consistent with the construct as delineated by Bride, Robinson et al. (2004). STS will be viewed as aligned with symptoms comprising a PTSD diagnosis following indirect exposure to traumatic material. As indicated by Bride (B. Bride, personal communication, Oct. 9, 2013), symptoms of STS will be regarded in alignment with the revisions to PTSD diagnostic criteria in the *DSM-5* (APA, 2013).

Symptom criteria for PTSD in the *DSM-5* (APA, 2013) are divided into four main clusters: intrusion, avoidance, negative alterations in cognition and mood, and arousal and reactivity. Following Bride's (B. Bride, personal communication, Oct. 9, 2013) direction, for this study, revisions to the instrument will be made based upon the current criteria. Revisions to the instrument will be discussed in the instruments section of this paper. As a result, STS will be viewed, measured, and analyzed as a separate construct, independent of other constructs in alignment with a *DSM-5* (APA, 2013) PTSD diagnosis.

DSM-5 PTSD and Secondary Traumatic Stress

There were several changes made in the *DSM-5* (APA, 2013) PTSD diagnostic criteria that warrant review given the STS construct's alignment with PTSD in this study as well as the lack of STS research with the revised PTSD diagnostic criteria. First, PTSD was reclassified

from the anxiety disorders category into a new chapter entitled, Trauma and Stressor-Related Disorders (APA, 2013). Diagnoses in this new chapter share common ground in that they all have exposure to trauma or stressful life events at the origin of the disorder. Weathers, Marx, Friedman, and Schnurr (2014) indicate that "the decision to reclassify PTSD was made primarily in recognition of the heterogeneity of posttraumatic clinical presentations, which may involve not only fear and anxiety, but also predominant dysphoria and anhedonia, anger and aggression, guilt and shame, dissociation, or some combination of all of these symptoms" (p. 94). A separate set of diagnostic criteria was also created for children six and under.

Second, there were several major changes in Criterion A. Criterion A2 in the *DSM-IV-TR* (APA, 2010) "The person's response involved intense fear, helplessness, or horror" was deleted. It was felt that this was not a necessary component in the establishment of a PTSD diagnosis as some will develop PTSD without these emotions associated to the traumatic event. And, even if they did experience these feelings, some may not be able to recall them later, particularly if a diagnosis occurs at a much later point following the traumatic event (Weathers et al., 2014).

Additionally, clarification was made in the former A1 criteria. "Threat to physical integrity" was changed to the more specific "sexual violence" (APA, 2013, p. 271). Four avenues of exposure are now indicated, two direct and two indirect. The first three exposure categories are similar to the previous version with some rewording and clarification. (1) "Directly experiencing the traumatic event(s)." (2) "Witnessing, in person, the event(s) as it occurred to others." (3) "Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental" A fourth avenue of exposure was added. (4) "Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders

collecting human remains; police officers repeatedly exposed to details of child abuse)" (APA, 2013, p. 271). Clarification is noted that this type of exposure "does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related." (APA, 2013, p. 271). Some believe that this additional type of indirect exposure may be related to the STS construct (Hensel et al., 2015) while others warn that the linkage of STS and a PTSD diagnosis warrant further research before being able to validate this assumption based upon the revised exposure criteria (Horesh, 2015). Horesh (2015) states that the lack of specificity in the STS construct definition and measurement as well as the very specific wording of this added indirect exposure provide indication that not all currently labeled as STS would qualify for the diagnosis. Horesh (2015) notes that the "*DSM-5* refers mostly to explicit rather than implicit knowledge about others' traumatic exposure" and that there is a "considerable gap that still exists between what *DSM-5* seems to define as secondary traumatization and what we already know from empirical studies" (p. 3). Nonetheless, Horesh (2015) and Hensel et al. (2015) highlight that indirect exposure and its resultant impacts have now been more clearly acknowledged as a result of the revisions to the PTSD diagnostic criteria.

The third central component of changes made to the *DSM-5* (APA, 2013) PTSD diagnostic criteria are the alterations of the symptom criterion including an additional criterion with symptoms added as well as the deletion of one previously identified symptom. Previously, three symptom clusters were identified: intrusion, avoidance and numbing, and arousal (APA, 2000). The *DSM-5* now has four symptom clusters: intrusion, avoidance, negative alterations in cognition and mood, and arousal and reactivity (APA, 2013). Avoidance and numbing are separated into two symptom clusters: avoidance (C) and negative alterations in cognition and mood (D). Criterion C has been decreased to two symptom aspects and Criterion D has added 3

additional symptoms: “negative beliefs or expectations about oneself, others, or the world,” “distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others” and self-blame regarding the event, and a “pervasive negative emotional state” (APA, 2013, p. 271-2). Criterion C7 “sense of a foreshortened future” was deleted (APA, 2000; APA, 2013). Two additions were also made to Criterion E, arousal and reactivity: “reckless or self-destructive behavior” and “irritable behavior and angry outburst typically expressed as verbal or physical aggression” (APA, 2013, p. 272).

Revisions of the PTSD diagnostic criteria have been noted to be substantial in the *DSM-5* (Weathers et al., 2014). Alterations to the initial gatekeeping criteria as well as the symptom clusters represent some distinct changes in our understanding of the development of PTSD as well as the expressed symptoms of the diagnosis. The alignment of STS alongside PTSD diagnostic criteria will certainly warrant further exploration as a result of these significant changes to determine whether the two constructs remain closely aligned.

Stress Process Theory

Stress process theory, first introduced in the literature in 1981, was noted as the first of its kind in viewing and analyzing stress from a sociological perspective rather than a psychiatric disorder (Avison, Aneshensel, Schieman, & Wheaton, 2010). Stress process was noted to incorporate three major domains: the sources of stress, buffers of stress, and manifestations of stress (Pearlin, Lieberman, Menaghan, & Mullan, 1981). Understanding how social factors influenced stress both positively and negatively was an important component of the stress process model rather than simply viewing the stressor independently (Pearlin, 1989). Pearlin (1989) also noted the importance of how individuals perceived the stressors in their lives to better understand the resultant impacts. What may be perceived as stressful to one individual,

may not be perceived as stressful to another. Values, according to Pearlin (1989), play a crucial role in this perception process as what one values makes a difference in how one ascribes meaning toward it. The meaning ascribed then impacts perception of threat to particular events or circumstances and thus to what degree stress is perceived. Menaghan (2010) noted the importance of awareness of stressful life events preceding and following the stressor to more fully understand the stress outcomes. Menaghan (2010) indicates that difficult life experiences can be both cumulative as well as interactive. As such, positive experiences from one stressful life event could potentially buffer the impacts of a current stressful life event or the opposite as well. Pearlin (1989) also notes that stressors must not necessarily be viewed as a singular incident as they can also be common enduring hardships in everyday life. Clearly, from this sociological perspective, stressors cannot be viewed in a bubble, but instead, must be seen in the context of their social environment and in relationship to one another.

To address stressors in the context of their social environment, stress process also incorporates the concept of stress buffers (Pearlin, 1989). Stress buffers can serve as a potential buffer on the stress outcomes. Stress buffers are noted to be the personal and social resources available to individuals. Pearlin (1989) identifies coping and social support as the primary source of stress mediation but also includes self-esteem and self-mastery as additional buffers to be considered. Self-esteem and self-mastery, according to Pearlin (1989), are personal resources that "appear to serve as appreciable barriers to the stressful effects of difficult life conditions" (p. 250). These personal resources provide a protective layer against negative stress outcomes. Coping and social support are noted to intersect in many ways but also have some unique distinctions. Coping is noted to be action oriented and refers to what people do in the context of stressful situations to help reduce the impacts. Pearlin (1989) indicates that "all coping-

regardless of the nature of the stressors, serves either to change the situation from which the stressors arise, to manage the meaning of the situation in a manner that reduces its threat, or to keep the symptoms of stress within manageable bounds" (p. 250). Social support as a stress buffer includes both formal and informal contexts. A solid understanding of social support, according to Pearlin (1989), includes both an understanding of a person's larger social network as well as the social resources perceived to be available and utilized by the individual.

In stress process theory, stress outcomes are seen in the context of stressors (past and present) alongside stress buffers (perceived, available, and utilized). In viewing stress from this model, the variation in outcomes can be better understood. Pearlin (1989) notes that stress process theory helps us to embrace the "inseparability between the circumstances of social life and individual functioning" (p. 252).

Studying the prevalence and severity of STS in the foster parent population is a step toward understanding the stress outcomes of caring for traumatized children. Determining whether foster parents are indeed experiencing STS and to what degree this is occurring in the foster parent population has not been addressed in the literature. However, beyond identifying the prevalence and severity of STS outcomes, it is also important to develop an understanding of factors that impact severity of STS as well as factors that buffer the impacts of STS. Understanding the stress process in relationship to stress outcomes can provide greater information with which to intervene and address STS in foster parents.

Stress process theory can be applied to foster parenting and STS to develop a framework for this research study. In alignment with Pearlin's (1989) stress process theory, three domains are addressed in this research study: stressors, stress buffers, and stress outcomes. Given the lack of research on foster parenting and secondary traumatic stress, some potential stressor variables

can be identified in the literature of a related population, child welfare professionals. Stressor variables frequently identified in child welfare related to STS include the personal trauma history of the worker, exposure to traumatic material, and experience in the professional role. Stress process theory's assumption is that stressors must be viewed in the context of not only current stressors, but also the impact of past stressors on current stressors and their resultant cumulative or interacting effects (Menaghan, 2010). These three stressor variables align well with this theoretical perspective.

Trauma history of the foster parent can be identified as a past stressor that could potentially have a cumulative or interacting effect on STS outcomes in foster parents caring for traumatized children. This past stressor can have a positive or negative impact on current stressors dependent on how the stressor was experienced and is perceived. Prior research on personal trauma history in child welfare professionals frequently indicates that prior trauma history has a negative cumulative effect on STS outcomes (Bride, Jones, & MacMaster, 2007; Cornille & Meyers, 1999; Nelson-Gardell & Harris, 2006).

Experience in the professional role has often been identified as a variable of interest in understanding STS outcomes in child welfare professionals. Though varying results have been found, some findings indicate that experience in the professional role can positively buffer the impacts of STS outcomes (Hensel et al., 2015). Foster parents with prior stressful, but overall positive, experiences as a foster parent may experience some buffering effects in their current stressful role and they might also feel some sense of mastery as a result of these prior experiences. Alternatively, the cumulative stress of ongoing engagement in the role could result in higher STS outcomes.

The third stressor variable, exposure to traumatic material, relates to the current identified stressor resulting from caring for traumatized children. Exposure to traumatic material has been noted in a number of child welfare research studies to have a negative effect on STS outcomes (Bride, Jones, & MacMaster, 2007; Cornille & Meyers, 1999). In alignment with stress process theory, all three variables are assessed together in relationship to the stress outcomes.

Stress buffers, according to Pearlin (1989) serve as potential buffers on the stress outcomes. Pearlin (1989) emphasizes a focus on coping resources and social support resources as likely buffers in the stress process as well as to a lesser degree, self-esteem or self-mastery buffers. Based on these types of potential buffers, as well as a review of the literature on STS in child welfare and helping professionals, three stress buffers were identified in this study's model: perceived support, perceived preparedness, and perceived self-care. As in stress process theory's emphasis on the individual experience in the context of their social environment, foster parent perception becomes an important component of this research model.

In a review of the literature on child welfare professionals, support is a frequently identified buffer of STS, though kinds of support identified as potential buffers have been varied (Hensel et al., 2015). Pearlin (1989) notes that "supporting relationships are found in virtually all institutional and social contexts: religion, occupation, family, neighborhood, voluntary associations, the medical care system, and elsewhere" (p. 251). Individuals with greater personal resources may perceive the need for less organizational support while others may perceive a need for greater connections outside of their personal networks to address the stressors associated with their foster parent role. As a result, amount and type of support utilized may be less important than whether the overall support needs are perceived to be met.

Coping as a stress buffer in stress process theory is identified by Pearlin (1989) as action oriented and something that an individual does in an attempt to lessen the impacts of the stress outcomes. Preparing for the emotional stress associated with child welfare work has been noted in the literature to be a potential buffering factor in STS outcomes (Caringi, Lawson et al., 2012; Pryce et al., 2007). In stress process theory, becoming emotionally prepared for the foster parent role would appear to align with an action oriented stress buffer. Emotional preparedness in foster parents could be achieved through a variety of means such as trauma training, developing skills to manage difficult behaviors, or engaging in personal counseling to address prior trauma history dependent on the needs of the individual.

Self-care could also be conceived as an action oriented coping buffer for STS outcomes. While results are varied on the subject of self-care and its impact on STS in child welfare professionals, self-care in general is frequently noted as a stress buffer in the helping professions as well as in the health care field (Manning-Jones et al., 2016). Definitions of self-care will vary between individuals in terms of what they feel they need to do to take care of themselves as well as the degree to which they feel they achieve these self-identified benchmarks. Self-care for one individual may involve physical exercise and regular eating habits and to another it may mean having alone time or taking a vacation. Stress process theory in its emphasis on individuals in the context of their social environment, helps to explain the varied self-care needs of individuals. As a result, perceived needs and perceived achievement of these needs may be more important than specific kinds of self-care or predetermined benchmarks.

Pearlin (1989) also notes that coping and social support buffers are related and that they can interact with each other to impact stress outcomes. Yet, each also has its own unique identifiers. In studying these variables together, their combined effect on stress outcomes can

prove more beneficial. STS outcomes in this study are conceptualized in the context of current and past stressors, along with the added stress buffers. Through the utilization of stress process theory in this study, an analysis of risk and protective factors can be studied in foster parents caring for children who have experienced trauma in relationship to STS outcomes. The analytic model for this research study is provided as Appendix A1.

Secondary Traumatic Stress and Child Welfare

STS in foster parents was selected as the focus of this study due to the identified prevalence of STS in studies of child welfare professionals (Bride, Jones, & MacMaster, 2007; Caringi & Hardiman, 2012; Conrad & Keller-Guenther, 2006; Cornille & Meyers, 1999; Nelson-Gardell & Harris, 2003; Regehr, Hemsworth, Leslie, Howe, & Chau, S., 2004; Salloum et al., 2015; Sprang et al., 2011), but the absence of published research on STS and the foster parent population. Prevalence rates of STS among child therapists are 6-26% and child welfare professionals have been noted to have even higher prevalence rates of up to 50% (NCTSN, 2011). Social workers in general are reported to have higher prevalence rates than other helping professions (Pryce et al., 2007; Sprang et al., 2011). And, child welfare professionals have been found to have higher prevalence rates than social workers in general (Bride, Jones, & MacMaster, 2007; Pryce et al., 2007). Sprang et al. (2011) note that simply identifying as a child welfare professional puts one at a heightened risk of STS.

In addition to understanding the prevalence of STS in child welfare professionals, research studies on STS also help shed some light on our current state of knowledge of this construct as it relates to the field of child welfare. Retention of child welfare professionals has long been an area of concern (Pryce et al., 2007). Recent reports indicate a turnover rate of 22% and a vacancy rate of 7% (Kelleher, Chavez, & Sciamanna, 2011). The impacts of child welfare

worker instability have been reported to result in poorer long-term outcomes for children in care as well as emotional impacts on foster children (Pryce et al., 2007). Developing an understanding of the challenges and needs associated with the child welfare professional role are an important component in addressing these high turnover rates. Various risk and protective factors have been the focus of child welfare research studies on STS in efforts toward understanding how to best provide support to workers through prevention and intervention efforts. In a review of the literature on child welfare and secondary trauma, it is evident that though growing, there is still a paucity of research available on the subject of STS and child welfare. A search of the PILOTS database with the search term "secondary trauma*" in peer reviewed literature revealed 174 articles on the subject of secondary traumatic stress. The terms "secondary trauma*" and "child*" found 43 articles and a narrower search of "secondary trauma*" and "child welfare" revealed only three articles. Zero articles related to foster parenting and STS were found within several search terms "secondary trauma*" and "foster care," "foster parent*" or "caregiver." A review of the ProQuest database with the search term "secondary trauma*" with no date range of peer reviewed articles found 1236 results. A narrowed search of "secondary trauma*" and "child welfare" yielded 36 results, 23 of which were potentially relevant to the field of child welfare. In a review of these articles, only 9 were specifically focused on child welfare and STS. Several searches were again conducted through ProQuest with the STS, foster care, and foster parenting search terms with zero results found specific to this specific subject and population. One article was found related to foster care and secondary trauma which focused on foster care caseworkers. Three results were found with the search terms "compassion fatigue" and "foster parent," which were related to foster parenting stress but not specifically to the STS construct. All were dissertation or thesis studies. As a result of the limited research available on child welfare and

STS, additional studies were included on STS and helping professionals to support the knowledge base for this research study's variables.

Secondary Traumatic Stress and Foster Parents

Though identified as one of the most crucial components of a healthy and successful child welfare system, foster parents, unlike child welfare professionals, have not been highlighted in the child welfare research on STS. There are no known published research studies on the topic of STS specific to foster parents. The majority of the literature on STS and the foster parent population appears to be either anecdotal, applied to this population based on child welfare professional research, or resultant from practice wisdom. Conrad (2004), in a newsletter publication for foster parents, discusses the notion that STS is a risk factor for foster parents. Conrad (2004) goes on to indicate why foster parents are at risk for the development of STS, ways to determine if a foster parent is experiencing STS and some personal coping strategies to address STS. However, Conrad's article appears to be based upon literature studying STS in child welfare or helping professionals, not foster parents.

The NCTSN has developed a trauma informed resource parent (foster parent) training curriculum to be utilized by foster care organizations nationwide (Grillo & Lott, 2010). This curriculum was designed to provide trauma informed education to foster parents to better support them in their roles of parenting traumatized children. The curriculum consists of eight modules addressing aspects such as understanding trauma and its effects, learning how to manage difficult behaviors, and effectively working with birth parents. Module eight addresses "self-care" and includes information on STS. The module defines STS as "trauma experienced as a result of exposure to a child's trauma and trauma reactions" (p. 8-7). The module goes on to discuss how a foster parent can be exposed to a foster child's trauma, how a foster parent can be impacted by

this exposure as well as what can happen if the foster parent takes the child's trauma on as if it were their own trauma. The module also provides case studies as well as coping strategies and self-care techniques to address STS. Sources listed in the NCTSN participant handbook do not include research on STS and foster parents.

Perry (2003) in his article on the impacts of working with high risk families and children notes "foster parents" to be among the list of people that are at risk of developing secondary traumatic stress though it is unclear how this conclusion is made. All of these publications assert that STS is a reality for foster parents and that there are identified symptoms as well as coping strategies associated with STS that can be applied to foster parents. However, none of these publications provide research to support their claims.

Based upon the research findings of STS in child welfare professionals as well as the anecdotal information being provided to foster parents, it is apparent that there is a significant need for research studies to first address the prevalence of STS in the foster parent population. Research is also needed to address factors which may be associated with the development and severity of STS in foster parents so that training curriculums can begin to provide evidence informed information and intervention strategies to better support foster parents in their crucial role within the child welfare system.

Stressor and Stress Buffer Variables

In a review of the literature, several variables of interest emerged in relationship to risk and protective factors associated with the prevalence and severity of STS in child welfare professionals. Given the limited research on STS and child welfare, the varying definitions of STS, as well as the use of several different measures in research studies, the findings related to each of the variables were often heterogeneous. In alignment with Pearlin's (1989) stress process

theory and the review of the literature, six variables of interest were identified for this study. Three domains are identified in the stress process: stressors, stress buffers, and stress outcomes (Pearlin, 1989). The stress outcome, or dependent variable, in this study is the frequency and severity of STS in foster parents. Several stressors have been the focus of STS research in relationship to the development of STS. Three stressor variables that have been of frequent study and interest to the child welfare field are included in this study: personal trauma history of the helper, indirect exposure to traumatic material, and experience in the field. Three stress buffer variables that have been evidenced in STS research will also be included: perceived support, perceived emotional preparedness, and perceived self-care. Following is a review of the literature on each of the study variables.

Personal trauma history and STS. Interest in the personal life histories of helping professionals has been of interest over time. Why individuals choose a career in the helping professions has at times been associated with their own personal history of difficult life experiences (Pryce et al., 2007). Choosing a career in social work over other careers has been linked to prior childhood psychosocial trauma (Rompf & Royse, 1994). Both Pearlman and Saakvitte (1995) and Figley (1995) note the potential impacts on the helping professional who has a personal trauma history.

Whether a personal trauma history has an impact on the development of STS in child welfare professionals has found some varying results, however, the majority have found a relationship to exist. Nelson-Gardell and Harris (2003) studied 166 child protection staff and supervisors utilizing the CTQ (Childhood Trauma Questionnaire) and the Compassion Fatigue Self-Test for Psychotherapists (CFST). Findings indicated a link between a personal trauma history and a higher risk for STS in child welfare professionals. The findings also indicate that

particular traumatic experiences including emotional abuse and neglect resulted in an even greater risk for STS. Bride, Jones, and MacMaster (2007) studied 187 child protection professionals utilizing the Secondary Traumatic Stress Scale (STSS), the Intent to Remain Employed–Child Welfare (IRE-CW) instrument, as well as the Professional Organizational Culture Questionnaire–Social Work (POCQ-SW). Findings indicated a statistically significant relationship between lifetime personal trauma history of the child protection worker and the severity of STS. Interestingly, the authors did not find a relationship between recent trauma history (within the past year) and STS. Cornille and Meyers (1999) studied 183 child protection workers utilizing the Brief Symptom Inventory (BSI) and the Impact of Events Scale – Revised (IES-R). Findings indicated a significant relationship between personal and work factors and the development of STS though the particular factors were not clearly explicated in the study to conclude that personal trauma history was significant in explaining STS. Caringi and Hardiman (2012) studied 103 New York state child protection staff utilizing both qualitative interviews as well as the STSS instrument. Findings from the qualitative interviews indicated that though workers may report a personal history of trauma, they did not frequently perceive this as problematic in their own lives. However, workers did perceive a personal trauma history to be problematic in their colleagues.

Given the limited number of STS studies specific to child welfare, particularly with the inclusion of personal trauma history factors, additional related STS research was also reviewed. Hensel et al. (2015) conducted a meta-analysis of the literature on STS and therapeutic work with trauma victims through a review of 38 relevant studies. Personal trauma history was one of only two of the identified variables found to demonstrate significance. Hensel et al. (2015) notes that, “a personal trauma history, different or similar to the client’s, was positively related to STS

in all included studies identified" (p. 87). Hargrave, Scott, & McDowall (2006), in studying STS in 64 volunteer crisis workers utilizing the Impact of Events Scale, found that personal trauma history's impact on STS was dependent on whether the individual felt the personal trauma was resolved. Experience and exposure did not have an impact on STS outcomes in this volunteer population. Baird and Kracen (2006) conducted a research synthesis of both VT and STS among professional helpers. Originally intended to be a meta-analysis, the authors found significant difficulties due to varying definitions and measures of the identified constructs and instead conducted a research synthesis. The authors identify three levels of criteria for their analyses dependent on the amount and type of studies supporting the hypothesis: persuasive evidence, reasonable evidence, and some evidence. In an analysis of the literature on STS and a personal trauma history, Baird and Kracen (2006) conclude that there is "reasonable" evidence to suggest that, "having a personal trauma history is linked to the development of STS" (p. 184). However, the authors also find that there is "reasonable" evidence to suggest that, "having a personal trauma history is not linked to the development of STS" and conclude that there is a lack of clarity in the research on STS (p.184).

Based upon a review of the child welfare literature on STS and personal trauma history as well as meta-analysis and research synthesis studies of the subject, it appears that though there are varying findings related to personal trauma history and STS, there is evidence to warrant continued study of this STS factor. It appears that this relationship has been evidenced more frequently in child welfare professionals than in other areas of STS study.

Exposure to trauma and STS. Few could argue that exposure to traumatic material in child welfare is an expected part of the job. Sprang et al. (2011) find that simply identifying as a child welfare professional over other helping professions increases the risk of STS. Cornille and

Meyers (1999) found frequent exposure to trauma to be evident in the course of daily work as a child welfare professional. Findings indicated that level of exposure, even on a short term basis can have an impact on the development of STS. Bride, Jones, & MacMaster (2007) in studying child protection professionals found a significant correlation between caseload size and STS and suggest that decreasing caseload size could have a positive impact on STS outcomes. Regehr et al. (2004) studied 156 Canadian Children's Aid Society workers utilizing the Impact of Events Scale (IES). Findings indicated that time since the last critical event as well as the number of critical events experienced were significantly related to STS. Caringi and Hardiman (2012) in a qualitative component of their research study on child protection staff found that workers perceived that as their caseloads increased, the likelihood for STS increased as well. Baird and Kracen (2006) in their research synthesis of STS and helping professionals also found "persuasive" evidence that "The amount of exposure (including hours with trauma clients, percentage on caseload, and cumulative exposure) to the traumatic material of clients increases the likelihood of STS" and only "some" evidence that the opposite was true (p. 184). Hensel et al. (2015) in a meta-analysis of the literature on therapeutic work with trauma victims found a strong effect size related to caseload ratio indicating that the proportion of traumatized clients or the proportion of time spent working with clients was correlated with increased levels of STS.

Alternatively, Perron and Hiltz (2006) in studying 60 forensic interviewers utilizing the STSS found no significant relationship between STS and frequency or amount of exposure. Elwood et al. (2011) in a review of the literature of STS and clinicians indicated that the results related to amount of time spent working with traumatized clients and the development of STS could not be clearly indicated one way or the other. Additionally, Elwood et al. (2011) note that in relation to frequency of exposure that "the majority of findings do not support a dose response

model of exposure in the development of STS" (p. 33). It is evident that again, findings are mixed in understanding the relationship between frequency and amount of exposure to trauma and the development of STS. Given the findings of studies specific to child welfare STS studies as well as the concurrent findings of one meta-analysis and a research synthesis indicating correlations between STS and frequency or amount of exposure, this variable warrants further research and is included in this study as a stressor variable.

Experience in the field and STS. It is often thought that a seasoned child welfare professional can better handle the stressors of the job and is thus at a decreased risk for the development of STS. However, research findings on the relationship between years of experience and STS do not consistently support this notion. Several studies found no correlation between experience and STS. Nelson-Gardell & Harris (2003) in studying child welfare professionals found that years of experience was not correlated to STS. However, younger workers in the study were found to have more STS. The authors conclude that life experience may be able to help the older workers to cope better with STS or that some who experienced STS at a younger age may have left the field (Nelson-Gardell & Harris, 2003). Bride, Jones, & MacMaster (2007) in studying child protection workers did not find a significant correlation between professional experience and STS. Cornille and Meyers (1999) also did not find a significant relationship between length of experience and STS in child welfare professionals.

Alternatively, others have found that a relationship does exist between experience and STS. Salloum et al. (2015) studied 104 child welfare case managers and supervisors utilizing the ProQOL and a Trauma Informed Self-Care (TISC) questionnaire and found higher levels of STS in workers with more experience. Length of time in the child welfare professional role did not buffer the impacts of STS but rather was found to increase the risk of STS.

Additional research on the relationship between STS and experience in the field revealed mixed findings. Hensel's et al. (2015) meta-analysis of the STS literature found a small but significant relationship between STS and experience in the field indicating that more experience can potentially buffer the impacts of STS. Elwood's et al. (2011) in a review of the literature of STS and clinicians found that "examinations of time spent working in the trauma field have revealed that when finding emerge, a shorter length of time treating trauma clients, rather than a longer time, is associated with greater symptom severity" (p. 33). Elwood et al. (2011) notes that although some research does not conclude with these findings, it is felt that employee attrition can account for some of this variance.

It is evident that there are quite varied findings in the literature on experience in the professional role and STS. Given that this can have significant implications on how and when we provide support and resources for experienced and new foster parents, it is an important variable of interest in this study.

Support and STS. Child welfare work requires support in a variety of contexts. This support can come in many different forms as contexts such as support at the organizational level, supervisory support, peer support, as well as support in personal support through family and friends. Whether support in its various forms can buffer the impacts of STS is an area of interest to researchers in efforts to understand how to intervene to address STS in the child welfare workforce.

Several studies have identified a relationship between various kinds of support and STS outcomes. Regehr et al. (2004) in studying Canadian Children's Aid Society workers found that organizational (union) support was not related to STS, however, engaging in meaningful relationships with others did appear to have an impact on reducing levels of STS. Caringi and

Hardiman (2012) in their qualitative analysis of 12 child protection staff found that workers felt that informal peer support helped to buffer the effects of STS and that supervision was helpful in mediating overall stress, but not specifically STS. Bride, Jones, and MacMaster (2007) in studying child protection workers also found a significant relationship between STS and peer support but no relationship between administrative support and STS. Dane (2000) conducted child welfare worker focus groups and found that support related to agency working conditions was felt to be needed in order to address the personal impacts of the difficult work.

Additionally, Slattery and Goodman (2009) in studying domestic violence advocates utilizing the PCL-S (Weathers et al., 1993) found that the quality of the supervisory relationship as perceived by the practitioners was significantly correlated with the level of STS.
Choi (2011) in studying 154 sexual assault and family violence social workers utilizing the STSS found that social workers who felt they had more support from their supervisors, teams and peers had less risk for STS. Hensel et al. (2015) in a meta-analysis of STS literature also found both work and social support to have small but significant positive effects on STS. Support appears to have been consistently found to be a buffer in the development of STS both in child welfare research as well as in other helping professional contexts. Interestingly, peer support presents in several studies as a valuable component in addressing STS. Organizational or supervisory support had mixed findings in its relationship to STS but appears to be dependent on the kind and quality of this support. Support as a stress buffer in the development of STS is an important variable of interest for this study with the foster parent population, particularly given prior research which indicates a lack of feeling supported in their role (Chipungu & Bent-Goodley, 2004; Rhodes et al., 2001).

Role preparedness and STS. Pryce et al. (2007) note that, "Few occupations offer the high level of emotionally charged human engagement of child welfare work" (p. 115). Preparedness for work in child welfare often refers to having acquired adequate training and education prior to entering the job. However, emotional preparedness has also emerged as an important component in being able to effectively engage in child welfare work and have minimal negative personal impacts. Caringi, Lawson et al. (2012) note that work in child welfare is unique and that workers are taught to separate their work and personal lives, learn to detach, and develop good boundaries, "however, the reality of working with children and families is that we must work in relation with one another" (p. 6). They note, "Perhaps in no other public setting are the emotions of workers 'managed'" (p. 6). As a result of their research, Caringi, Lawson et al. (2012) found that the "emotional labor" aspects associated with the child welfare professional role must be addressed by organizations with training and support on all levels.

Caringi and Hardiman (2012) in their focus group study of child protection staff found that all 12 participants entered the field of child welfare "haphazardly" and many felt unprepared for the cases on their load which was perceived to have an impact on their personal STS outcomes. Dane (2000) also conducted focus groups of 10 child welfare workers and noted that all workers indicated that they initially came to the agency "'gung ho' and enthusiastic" but soon found difficulties in coping with the experiences on the job (p. 32). As a result of the emotional aspects of their work, all participants reported behavioral changes over time such as detachment and "cutting off" that often impacted both their personal and professional lives. Pryce et al. (2007) discuss the emotional and behavioral changes in new workers and the "loss of innocence" as they engage with traumatic life circumstances of their clients (p. 34).

In additional research on STS and helping professionals, Baird and Kracen (2006) in their research synthesis found that there is "some" evidence to suggest that "perceived coping ability is a protective factor for STS" indicating that emotional preparedness could be a potential stress buffer in the development of STS. Hensel et al. (2015) in a meta-analysis also found a small but non-significant effect size for emotional involvement which was defined as "the ability to separate oneself emotionally from work with clients" (p. 85). It was noted that available research was quite limited in scope and had varying measurement thus warranted further future study.

Preparing foster parents for their caregiving role is widely accepted today. As of 2010, 46 states required some form of pre-service training for foster parents, 26 states required a specific number of hours of training and nineteen states required a specific training course (Child Welfare, 2011). Common areas of training include: licensure requirements, agency policies and procedures, roles and responsibilities of foster parents, child development, behavior management and discipline, cultural sensitivity, attachment, separation, and loss, home and child safety, and the impact of fostering on the foster parents' own families (Child Welfare, 2011). Foster parent training has been noted in the literature to be of critical importance in helping foster parents to be successful in their roles (Cooley & Petren, 2011; Dorsey et al., 2008; Rhodes et al., 2001). Benefits of training are found to include increased placement stability, knowledge and support in building and maintaining agency relationships, connections with other foster parents, less burn-out, improved placement matching, and better foster parent/child relationships (Cooley & Petren, 2011). Beltran and Epstein (2011) in their review of foster parent training requirements across the nation indicate that we aren't clear on what standards and content are sensible or necessary. Emotional preparedness appears to be less emphasized in the training process. Given the findings on STS and emotional preparedness in child welfare studies as well as the knowledge of the

importance of training on placement stability and outcomes, emotional preparedness is an important variable of interest for this study and can align well with a stress process theory coping buffer.

Self-care and STS. Self-care is a concept often identified as an important component of emotional health and a buffer for the impacts of traumatic exposure in the child welfare profession yet few studies exist to validate these presuppositions. Pryce et al. (2007) state, "Physical self-care is under the control of the child welfare practitioner" (p. 63). In their practice experience in working with child welfare professionals related to STS, Pryce et al. (2007) identified several aspects of physical self-care that were perceived by child welfare practitioners to be helpful in supporting physical well-being while engaging in their difficult role including "sleep, rest, exercise, good nutrition, reliable transportation, massages, hot tubs, and sex" (p. 61). Other aspects of self-care noted by Pryce et al. (2007) include social self-care, spirituality, emotional self-care, humor, coping strategies and coping skills, as well as professional development. Based upon practice experience, self-care was noted to be one component impacting the development of STS and as such, identified as an important component of their intervention plan to address STS in the child welfare workforce.

As a result of focus group research and the personal challenges expressed by child welfare workers, Dane (2000) also concluded that self-care was an important aspect in addressing STS in child welfare workers. Dane (2000) created a model to address STS which incorporates aspects of self-care including assessing personal coping strategies and building personal coping skills to be utilized with child welfare professionals.

Manning-Jones et al. (2016) studied STS and coping strategies in 365 health professionals (social workers, nurses, counselors, psychologists, and medical doctors) in New

Zealand utilizing the STSS. One coping strategy of interest, self-care, was studied utilizing the Self-Care Utilisation Questionnaire (SCUQ). Findings indicated that the utilization of self-care was related to lower levels of STS and that out of all the coping strategies studied (social support, self-care, and humor), self-care demonstrated the most significant relationship to lower levels of STS.

Alternatively, Salloum et al. (2015) studied 104 child welfare case managers and supervisors utilizing the ProQOL as well as a Trauma Informed Self-Care (TISC) questionnaire developed by the researchers to assess the relationship between self-care and STS, CF, burnout, and compassion satisfaction (CS). "TISC refers to specific type of practice that is relevant to dealing with traumatized populations" (p. 59). This includes both work related and personal aspects of self-care. Findings indicated that greater levels of TISC were associated with higher levels of CS and lower levels of burnout. However, TISC was not related to STS indicating that TISC may not buffer the effects of STS.

Bober and Regehr (2006) had similar conclusions in studying 259 helping professionals utilizing the Trauma Symptom Inventory (TSI) in relation to coping styles, self-care and STS. Findings indicated that there was no association between the amount of time spent in leisure activities or self-care activities and traumatic stress scores. Findings did indicate that personal coping strategies, however, were related to overall work stress. Killian (2008) added to these findings in a study of helping professionals in relation to self-care and the development of traumatic stress. Individual interviews of 20 professionals working with child sexual abuse survivors were conducted in addition to surveys administered to 104 professionals working primarily with child sexual abuse cases. Findings from the survey indicated that individual coping strategies and self-care were not significant in impacting symptoms of traumatic stress.

However, findings from the qualitative study indicated the perceived importance of engaging in self-care and coping strategies.

Limited research studies are available on the subject of self-care and STS in helping professionals and even fewer specific to child welfare. Yet, self-care is frequently included in intervention efforts to address STS with child welfare professionals (Dane, 2000; Hendricks, 2012; NCTSN, 2013; Pryce et al., 2007) and foster parents (Conrad, 2004; NCTSN, 2010). The Resilience Alliance Project identifies moving beyond self-care in their model to address STS. Their intervention model focuses on both individual coping skills as well as organizational functioning and culture to address STS with reported success of program (Tullberg, Avinadav, & Chemtob, 2012). Given the amount of emphasis on self-care in child welfare, the limited research on the subject of STS and self-care, as well as the varying findings, this is an important variable of continued study in understanding its relationship to STS both in child welfare professionals as well as foster parents.

Summary

The study of foster parenting and STS is absent from the literature. Studies related to the personal aspects associated with the challenges of foster parenting also appear to be very limited. Available research on personal impacts appears to have been by happenstance in studying other foster parent topics. It is evident from the literature that foster care placements play a significant role in positive child outcomes. However, it is also apparent that the foster parent role comes with both rewards and challenges and a deeper understanding of the emotional challenges is needed in the literature. Research on STS in child welfare professionals has primarily begun to emerge in the literature in the last ten years. These studies have consistently found prevalence of STS in child welfare professionals at much higher rates than other helping professions as well as

other occupational roles. Working in child welfare it seems can be emotionally taxing and have broad impacts on those who engage in this profession, cognitively, emotionally, and behaviorally. Foster parents, though in a different role, engage with the same population of children as that of child welfare professionals. Given that these workers are noted to be at heightened risk of STS due to their work with traumatized children, a study of STS in foster parents appears to be warranted.

Chapter 3

Method

Overview

The purpose of this study is to explore the prevalence and severity of STS in foster parents caring for children who have experienced trauma. This study employs a cross-sectional survey design, using a revised version of a standardized instrument to measure STS, and additional items constructed to obtain data necessary for addressing the research questions. The study investigates the association between selected stressors (foster parent personal trauma history, years of foster parenting experience, and exposure to foster child's trauma), selected stress buffers (perceived support, perceived preparedness, and perceived self-care) and the severity of STS. Additionally, the study investigates the degree to which a combination of stressors and stress buffers explain the severity of STS in foster parents. Through these analyses, the study seeks to develop a deeper understanding of the personal impacts associated with caring for traumatized children in a foster parent role.

Participants

Licensed foster parents in Kent County, Michigan who identify as the primary caregiver of a foster child currently placed in their home were selected for inclusion in this research study. The primary caregiver was selected for this study due to the likelihood of more frequent and intense indirect exposure to the child's trauma. The study instrument measures STS symptoms within the last 7 days, so only licensed foster parents currently caring for a foster child are included in the research study (Bride, Robinson et al., 2004).

There are five licensed foster care organizations in Kent County, Michigan that are contracted through the State of Michigan to provide children's foster care services. These five

foster care organizations were contacted and invited to participate in this research study on STS and foster parenting. The research study was presented at a monthly foster care licensing coalition meeting in which all five organization representatives were present. The research questions as well as a sample copy of the research survey were provided to organization representatives. A follow-up email was then sent to each of the organization representatives with a detailed discussion of the research study including study documents and survey distribution procedures. Four of the five organizations responded positively indicating an interest in participating in the research study. The fifth organization declined to participate for unknown reasons. The four participating foster care organizations (Bethany Christian Services-Grand Rapids, Catholic Charities of West Michigan, Wellspring Lutheran Services-Kentwood, and Samaritas of West Michigan) represented 420 of the total 521 licensed foster homes in Kent County, Michigan at the time of survey distribution (Michigan Department, 2016). Each participating organization representative was asked to provide a current number of licensed foster homes at the time of survey distribution as well as the number of licensed foster homes with a foster child currently in their home. A total of 255 licensed foster homes were identified as having a potential study participant meeting the inclusion criteria (licensed foster parent with a foster child currently in the home and being the primary caregiver of the foster child).

The identified foster homes were provided with information regarding the foster parent survey and the primary caregiver for the foster child was offered the opportunity to participate in the research study. A total of 202 foster homes were sent an email survey link through their foster care organization asking the primary caregiver of the foster child to participate in an online survey through survey monkey. In addition, a total of 53 paper surveys were sent out to foster homes without an email address on file, asking the primary caregiver to participate in either an

online or mail in paper survey. Data were collected over a period of four weeks to allow for follow up emails to be sent by the organizations and for paper surveys to be returned to the researcher. A total of 62 online survey responses were received through survey monkey and 3 paper surveys were returned for a total of 65 respondents. This represents a 25.5% response rate.

In order to confirm eligibility for the study, in the survey, foster parents are asked to indicate whether they are a licensed foster parent with a foster child currently in their care as well as whether they are the primary caregiver for the foster child. In addition to the distribution process of providing the survey to foster parents that met inclusion criteria through the foster care organizations, these additional survey questions helped to safeguard that all study participants were able to meet the inclusion criteria. These inclusion parameters helped to ensure that the study participants could sufficiently complete the survey and the secondary traumatic stress instrument. Of the 65 respondents, nine were excluded from the study as they did not self-identify as meeting the initial inclusion criteria for participation in the research study of being both a licensed foster parent with a foster child currently in the home and identifying as the primary caregiver of the foster child.

Of the nine respondents that did not meet inclusion criteria, four indicated that they are adoptive parents. These individuals may have been foster parents but recently moved into the adoption phase or they could consider themselves to currently be adoptive parents rather than foster parents while their licensing organization may still list them as foster parents. As their actual status could not to be determined beyond their self-report on the survey, these participants were considered to not meet the qualifying criteria for participation and excluded from the analysis. An additional six respondents had crucial missing data and were also excluded from the

analysis. As a result of these exclusions, a total of 50 participants were included in the research study analysis representing 20% of the foster parent population sampled.

Foster parent demographics. The mean age of foster parent participants was 41 years old (M = 40.6, SD = 10.65) with ages ranging from 27-68. The study's sample was primarily female (n = 42, 84%). The majority of participants were married (n = 44, 88%) and Caucasian (n = 47, 94%). Participants were more evenly distributed in residential locations, with city/urban (n = 19, 38%), suburban (n = 16, 32%), rural (n = 14, 28%), and other (n = 1, 2%). Thirty-two percent of foster parent households had an annual income of less than $60,000 ($n$ = 16) while 50% of the households earned between $60,000 and $119,000 ($n$ = 25) and 14% had incomes above $120,000 ($n$ = 7). A small percentage of study participants (n = 14, 28%) did not work outside of the home. However, most participants (n = 36, 72%) indicated that they work at least part-time outside of the home in addition to their role as a foster parent and 38% percent (n = 19) stated they work more than 40 hours a week in addition to their role as the primary caregiver for foster children (Table 1). Grimm and Darwall (2006) note that limited data is collected on foster parents within the child welfare system. Kirby (2015) in a study of foster parent demographics found the majority of foster parents to be Caucasian (78%) and married (79%). Kirby (2015) found a higher percentage of African American foster parents in the demographic study (17%) in comparison to the general population. This study had a more limited (4%) representation of African American foster parents.

Foster parent role characteristics. The majority of study participants are caring for a foster child in the 0-5 age range (n = 40, 80%). Somewhat fewer foster parents in the sample are caring for children in the 6-12 age range (n = 16, 36%). Only a small portion are caring for a teenager in the 13-21 age range (n = 5, 10%). The National Adoption and Foster Care Analysis

and Reporting System [AFCARS] (2015) indicates that 39% of children in foster care are between the ages of 0-5 and that 31% percent are between the ages of 6-12 and another 30% are between the ages of 13-20. Given these national data on foster care demographics, it appears that the sample could contain a disproportionately lower number of foster parents caring for teenagers who are in foster care. However, the study sample does not include other living arrangements where older foster youth may reside including group homes, independent living arrangements, homeless and runaway youth, and short-term residential facilities. These types of living arrangements also account for some of the placements for the 30% of youth ages 13-21 in foster care.

The majority of the participants reported having one foster child currently in the home (*n* = 26, 52%). One-third were caring for two foster children (*n* = 16, 32%), and a limited number were caring for three foster children (*n* = 4, 8%), and few were caring for more than four foster children (*n* = 4, 8%). Thirty percent of participants (*n* = 15) indicated that they are currently caring for one or more adoptive children in addition to their foster children. Fifty-four percent (*n* = 27) had no biological children in the home and 46% (*n* = 23) reported currently caring for one to three biological children in addition to their foster children. Kirby (2015), in a demographic study of 218 foster parents, found the average foster home to have three children total with an average of 1.5 foster children current placed in the home. This study of foster parents found a mean of 1.76 foster children currently in the home, similar to that of Kirby (2015).

The majority of foster parents indicated having cared for three or less total foster children since becoming a foster parent (*n* = 28, 56%). Twelve foster parents indicated caring for four to six total foster children (24%). Four foster parents noted caring for a total of seven to ten foster children and six foster parents had cared for a total of ten or more. One foster parent reported

Table 1

Demographic Characteristics of Foster Parents (N = 50)

Characteristic	*n*	%	*M*	*SD*
Age			40.6	10.65
Sex				
Male	8	16		
Female	42	84		
Relationship Status				
Married	44	88		
Single Cohabitating	2	2		
Single Never Married	1	4		
Divorced	1	2		
Widowed	1	2		
Other	1	2		
Race				
White/Caucasian	47	94		
Black/African American	2	4		
American Indian/Alaskan Native	1	2		
Region				
City/Urban	19	38		
Suburban	16	32		
Rural	14	28		
Other	1	2		
Household Income	48			
$0-29,999	3	6		
$30,000-$59,999	13	26		
$60,000-$89,999	15	30		
$90,000-$119,999	10	20		
$120,000-$149,999	5	10		
$150,000-189,999	2	4		
No Answer	2	4		
Hours Worked Outside the Home				
0	14	28		
1-10	1	2		
11-20	6	12		
21-30	1	2		
31-40	9	18		
40+	19	38		

caring for 25 total foster children and another 50 foster children. There is a range of new and experienced foster parents represented in this study.

Procedure

Research study documents were submitted to Michigan State University's Institutional Review Board (IRB) for approval of the research study prior to distribution of the study survey and data collection. The study application, including procedures, participant informed consent form, and study survey were submitted and approval was obtained through MSU's IRB with an exempt status (Appendix B). In the process of carrying out this research study, the researcher adhered to all requirements as indicated by the IRB for carrying out a research study with human subjects.

In order to ensure confidentiality of the study subjects, the participating foster care organizations were provided with a survey link and a brief description of the research study to share through email communication with their licensed foster homes that currently have a foster child in their care in their domestic foster care programs. The foster care organizations sent the email and survey link directly to their foster parent lists. The researcher did not have access to foster parent names and email addresses. The surveys were then submitted anonymously directly to the researcher so that the foster care organizations did not have access to completed surveys nor were they aware of who did or did not completed the survey. One adult in the licensed foster home that identifies as the primary caregiver of the child was asked to complete the survey. Given that the primary care provider has the most significant amount of direct contact with the child as well as with the foster care system, it is more likely that this individual will be exposed to the child's trauma and can best complete the survey questions. Foster parents who do not have a foster child currently in their care or who are not licensed or did not identify as the primary

caregiver of the foster child were not included in the research study. Kinship caregivers who are licensed foster parents with a foster child currently in their care were included the study. Kinship caregivers are individuals or families that are caring for the children of their extended family members or close friends (CWLA, 2010). These kinship caregivers and the children placed in their home are receiving supervision and support from a foster care organization while they parent in this capacity for family or close friends. Some licensed kinship caregivers are also caring for unrelated foster children in addition to the children that are considered to be in a kinship capacity.

Through email communication from their foster care organization, foster parents were provided with a web link to access the detailed study description, the participant informed consent document, as well as the online survey. To protect participant rights, study subjects were asked to read an "informed consent" statement prior to participation in the research study. In order to be able to participate in the research study, the participants were required to read the "informed consent" document prior to being able to proceed with the survey completion (See Appendix C for survey and consent form). Proceeding with the online survey indicated that the participant had provided informed consent. The informed consent document explained rights as a potential study participant as well as the voluntary nature of the study. In the informed consent document, participants were provided with information on the purpose of the research study as well as the potential benefits and risks to the study participant. Participants were also provided with information on how to contact the researchers for further information on the study results as well as to express any questions or concerns. Participants were informed of the confidential nature of the survey information and the process by which these records will be kept to ensure security and confidentiality of their survey responses.

Foster parents were asked to complete the survey anonymously in an online format. No personal identifying information was included in the survey in order to protect the confidentiality of the study participants. Foster care licensing organization staff would not receive the completed surveys as they were submitted online through SurveyMonkey, directly to the researcher to avoid any coercion or confidentiality issues in the data collection process. Data were collected from the online surveys over the course of four weeks following the survey link distribution. Foster care organizations were asked to send out one email each week for two weeks providing information on the research study and how to access the online survey. The first email was an introduction to the study with a link to the survey. The second email was a reminder with a link to the survey. The foster care organization received a reminder as well to distribute the second round of email reminders. Study participants who submitted a completed survey were given the option of entering into a drawing for one of two $50 Amazon gift cards. Their submission for the gift card drawing was not linked to their survey submission. Following completion of the online survey, participants were provided with an optional link to enter their name and address for entry into the gift card drawing which was a separate link from the online survey so that the surveys and names were not connected. A random drawing within one month following the data collection completion determined the recipients of the $50 Amazon gift cards. Survey participants were not required to enter the drawing but could choose to do so following completion of the survey. The winners of the gift cards were notified by U.S. mail and the $50 gift cards were delivered via U.S. mail.

Licensed foster parents that did not currently have an email address on file with the foster care organization were provided with an opportunity to complete and return a paper survey. Foster care organizations were provided with paper surveys in stamped envelopes to address and

send out to their foster parents without email addresses. The envelope included a letter providing a brief description of the research study, a consent statement, a paper survey, a stamped return envelope, and a gift card drawing entry form. The letter also included a link to the online survey in case participants preferred to complete the survey online. Participants were required to create a unique personal identifier in both the online and paper survey so that their responses could only be recorded once. Completed paper surveys were to be returned in the stamped envelope directly to the researcher. Mail survey participants were also provided with an opportunity to participate in the gift card drawing by choosing to complete and return the gift card drawing entry form in the envelope with their survey. Upon receipt, it was indicated that the researcher would immediately separate the completed survey from the gift card entry form so that the participant survey responses would remain anonymous. No data were recorded with identifying participant information. Collected data are kept in a locked file cabinet and password protected computer located at Michigan State University, School of Social Work, Baker Hall, Room 202.

Of the foster parent population in Kent County, Michigan (N = 521 licensed foster homes), based upon a power analysis, it was anticipated that a sample size of 50-100 participants was needed at a confidence level of 95% and margin of error of 10%. A minimum sample size of 50 participants was desired. Four of the five foster care organizations in Kent County, Michigan agreed to participate in the research study (n = 420 licensed foster homes) providing a smaller sampling pool than originally anticipated. A total of 65 survey responses were collected within the four foster care organizations. After excluding cases that did not meet study inclusion criteria (n = 9) as well as cases that were missing key data (n = 6), a total of 50 study participants were obtained through the four participating foster care organizations. Efforts were made to obtain a minimum of 50 study participants through several avenues of communication. The five

Kent county foster care organizations were provided with detailed information about the research study and a presentation was made to the Kent County Foster Care Licensing Coalition to garner agency support for the research study. Participants were offered an incentive of being entered into a drawing for one of two $50 Amazon gift cards in exchange for their participation in the survey. The survey was designed to be brief (approximately 15 minutes to complete) in order to encourage greater participation. The survey was distributed in two different formats in order to be able to reach potential participants with and without access to online communication. A 25% (n = 65) response rate was obtained with a usable participant sample of 20% (n = 50) from the four foster care organizations.

Measures

Applying knowledge from research studies of similar populations, this study explores the prevalence and severity of STS in foster parents utilizing the Secondary Traumatic Stress Scale (STSS; Bride, Robinson et al., 2004). The STSS scale is a 17-item instrument measuring the negative effects of secondary exposure to trauma in clinicians working with traumatized populations. Bride, Robinson et al. (2004) has provided additional instructions for adaptation of this instrument in measurement of other populations: “NOTE: Client is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, etc.” (p. 13). The STSS has been utilized in studies of child welfare professionals, social workers, mental health professionals, substance abuse counselors, as well as juvenile justice workers, nurses, and caregivers of military veterans. Administration of the STSS to foster parents provides additional data on the occurrence of secondary traumatic stress impacts of foster parenting children who have experienced trauma. The STSS addresses symptoms consistent with primary exposure to

trauma (intrusion, avoidance, and arousal) acquired secondarily as a result of indirect exposure through the traumatic experiences of another person(s).

The STSS was originally designed to assess the existence of secondary traumatic stress based upon secondary exposure to trauma, mirroring *DSM-IV-TR* (APA, 2000) PTSD criteria (Bride, Robinson et al., 2004). The original STSS instrument includes three subscales: intrusion (items 2, 3, 6, 10, & 13), avoidance (items 1, 5, 7, 9, 12, 14, 17), and arousal (4, 8, 11, 15, & 16). The STSS is currently in revision to more closely align with the *DSM-5* (APA, 2013) criteria for PTSD (B. Bride, personal communication, June 11, 2015). The *DSM-5* (APA, 2013) diagnostic criteria for PTSD are separated into the following eight criteria: (A) exposure to trauma, (B) intrusion symptoms, (C) avoidance symptoms, (D) negative alterations in cognition and mood symptoms, (E) alterations in arousal and reactivity symptoms, (F) duration of symptoms, (G) impaired functioning, and (H) not due to other conditions.

In addition to the reorganization of *DSM-IV-TR* (APA, 2000) symptoms into these revised categories, three new symptoms have been added:

> Criterion D - persistent and distorted blame of self or others and persistent negative emotional state.
>
> Criteria E - reckless or destructive behavior. (APA, 2013).

Bride has indicated the inclusion of four additional questions to the original STSS instrument to address the *DSM-5* (APA, 2013) PTSD criteria revisions:

> "I experienced intense negative emotions" (Criteria D)
>
> "I engaged in reckless of self-destructive behavior" (Criteria E)
>
> "I unrealistically blamed others for the cause or consequences of the traumas experienced by my client(s)" (Criteria D)

"I had negative expectations about myself, others, or the world" (Criteria D) (B. Bride, personal communication, June 11, 2015).

As a result of the additional symptom cluster and the reorganizing of prior PTSD symptoms into different clusters, the STSS subscales also are revised. The intrusion subscale will include items 2, 3, 6, 10, and 13 of the original STSS instrument. The avoidance subscale includes items 12 and 14 of the original STSS instrument. The negative alterations in cognition and mood subscale includes items 1, 7, 9, and 17 of the original STSS instrument as well as the added items 18 (I experienced intense negative emotions), 20 (I unrealistically blamed others for the cause or consequences of the traumas experienced by my foster child), and 21 (I had negative expectations about myself, others or the world). The alterations in arousal and reactivity subscale includes items 4, 8, 11, 15, 16 of the original STSS instrument as well as the added item 19 (I engaged in reckless or self-destructive behavior). Bride has also indicated deleting item number 5 (I felt discouraged about the future) from the STSS instrument to address the exclusion of the foreshortened future symptom in establishing a PTSD diagnosis in the *DSM-5* (APA, 2013) (B. Bride, personal communication, June 11, 2015). Bride recommends retaining this question for potential comparison analyses with previous STS child welfare studies but not including it in the computation of STSS scores (B. Bride, personal communication, Oct 9, 2013). See Appendix C for participant survey with included STSS scale items.

Currently, there do not appear to be any published research studies utilizing this revised STSS instrument. The original STSS has demonstrated discriminant, convergent, factor validity, and internal validity in previous studies with a coefficient alpha of .93 (Bride, Robinson et al., 2004; Ting, Jacobson, Sanders, Bride, & Harrington, 2005). Bride, Robinson et al. (2004) assessed discriminant and convergent validity through a validational study of 287 licensed social

workers. To address convergent validity, the STSS outcomes were analyzed in comparison to anxiety and depression scores which are constructs associated with PTSD. Additionally, the STSS scores were compared to the extent and frequency of exposure to trauma which have been reported to impact traumatic stress outcomes. STSS outcomes were then compared with demographic variables of age, ethnicity, and income to assess discriminant validity (Bride, Robinson et al., 2004). Factor validity was assessed through a confirmatory factor analysis utilizing structural equation modeling to determine if the STSS responses could be explained by the three factors in the study, intrusion, avoidance, and arousal (Bride, Robinson et al., 2004).

The STSS instrument is grounded in the *DSM-5* (APA, 2013) understanding of PTSD. The *DSM-5* now clearly identifies secondary exposure to trauma as a potential means of developing post-traumatic stress symptoms under certain conditions (NCPTSD, 2012) and the revised STSS closely aligns with the *DSM-5* (APA, 2013) PTSD diagnostic criteria of PTSD in criteria B, C, D, and E. (B. Bride, personal communication, Oct. 9, 2013). As a result of the STSS instrument's alignment with current PTSD criteria in the *DSM-5* (APA, 2013), the STSS is most closely linked to this study's identified definition of STS and best fits the purposes of this research study. The STSS has been noted to be frequently utilized in empirical studies of STS and to be most closely linked to the prevalent definition of STS being aligned to PTSD criteria (Elwood et al., 2011).

The STSS instrument utilizes a 5-point Likert type scale for participants to rate their perception of how frequently each statement was true for them in the past seven days (Bride, Robinson et al., 2004). Instrument statements are tailored specifically toward one's professional role with clients. The STSS provides instruction to substitute a different term for a population group that is particularly relevant to the individual's role with examples such as "consumer,

patient, recipient" (Bride, Robinson et al., 2004). The STSS assumes exposure to traumatic material through one's work with an identified population group and specifically gears statements toward linking symptoms to work related exposure with this population (Bride, Robinson et al., 2004). It is hoped that this will more specifically measure indirect exposure within a particular frame rather than other aspects of direct or indirect traumatic experiences that the helping professional may face. In this research study "foster children" are the identified population group substituted for "client" in the instrument included in the participant survey. Bride reviewed and approved these revised "foster child" statements that are intended to align with the foster parent role (B. Bride, personal communication, April 13, 2010). The STSS only assesses criteria B, C, D, and E of PTSD criteria in the *DSM-5* (APA, 2013).

The STSS instrument can be scored and assessed in three different ways, the algorithm approach, the cutoff score approach, and the normative approach (Bride, 2007). The algorithm approach assesses whether the individual meets the identified number of symptoms in each of the four symptom criteria. In order to first qualify as meeting an identified symptom, the individual must rate the statement as "occasionally," "often," or "very often" based upon the individual's perception of the last seven days. Second, the individual must then meet the identified number of required symptoms for the particular criterion (intrusion = 1, avoidance = 1, negative alterations in cognition and mood = 2, and alterations in arousal and reactivity = 2) which is consistent with the *DSM-5* (APA, 2013). Finally, the individual must meet the identified number of symptoms in all four criteria in order to qualify for STS consistent with a PTSD diagnosis based upon secondary exposure through working with the identified population (Bride, 2007; B. Bride, personal communication, Oct. 9, 2013).

According to the cutoff score approach, the instrument is scored with points ranging from 1 (never) to 5 (very often). On the revised 20-item STSS instrument, total participant scores can range from 20 to 100 with 20 indicating no STS and 100 indicating very high STS. The total instrument score is calculated by adding the sum of all four subscales. Bride (2007) indicates that "by comparing scores on the STSS with the algorithm approach, estimates of sensitivity and specificity can be obtained" and a cutoff score can then be established (p. 68). A cutoff value at or above the threshold indicates meeting the necessary aspects to qualify as meeting the STS threshold of moderate to severe distress (Bride, 2007). The original instrument utilized a cutoff value of 38 (Bride, 2007). With the added four items and deletion of item five, Bride has recommended a cutoff value of 45 with the newly revised 20-item instrument (B. Bride, personal communication, June 11, 2015).

The normative scores approach compares individual scores with identified normative scores for the STSS instrument. Bride (2007) provided normative scores for the original 17-item instrument of 17-27 no STS, 28-37 mild STS, 38-43 moderate STS, 44-48 high STS, and 49+ Severe STS. Bride has not provided updated normative scores for the revised STSS instrument. For the purposes of answering the research questions in this study, both the algorithm and the cutoff score approaches are utilized in the analysis of the foster parent STSS data.

Additional instruments that have been utilized to measure STS were reviewed and rejected for use in this study. The ProQOl measures compassion satisfaction and compassion fatigue with the inclusion of a 10-item subscale for the measurement of STS (Stamm, 2010). The ProQOL instrument does not clearly identify and separate specific *DSM-5* (APA, 2013) diagnostic criteria for PTSD in its scoring. Stamm (2010) does, however, identify trauma symptoms (arousal, avoidance, and re-experiencing) in the manual's definition of STS. The IES-

R (Weiss & Marmar, 1997) is a 22-item instrument which is more closely aligned with specific criteria and measurement of PTSD utilizing *DSM-IV-TR* (APA, 2013) diagnostic criteria for PTSD (NCPTSD, 2016). The IES-R, however, does not incorporate the secondary trauma exposure aspects which are now included in a PTSD diagnosis. While symptoms are consistent with the STS construct, secondary exposure is not as easily recognized in this instrument.

The STSS has been revised by Bride based upon the *DSM-5* criteria revisions for Post-Traumatic Stress Disorder made by the American Psychiatric Association (Post Traumatic Stress, 2013). The PTSD revisions are the result of a fourteen-year process of the APA involving extensive research and data collection (Post Traumatic Stress, 2013). Bride's original STSS instrument based upon the *DSM IV-TR* (APA, 2000) criteria for PTSD was found to be effective in measuring STS (Bride, Robinson et al., 2004; Ting et al., 2005). The criteria utilized in the original STSS were based upon PTSD constructs identified in the *DSM-IV-TR* (APA, 2000). The revision of the STSS instrument utilized a consistent process in the development of new items and deletion of an old item based upon the revised *DSM-5* (APA, 2013) PTSD criteria (B. Bride, personal communication, Oct. 9, 2013).

In addition to the STSS instrument, the participant survey includes questions related to foster parent demographics (age, gender, ethnicity, relationship status, geographic location, socio-economic status, employment status), foster parent role characteristics (number of foster and other children in the home, age ranges of foster children, years of experience as a foster parent, total number of foster children cared for, longest and shortest length of stay of foster children, exposure to foster child trauma, types of exposure to traumatic material, and frequency of exposure to traumatic material) as well as foster parent trauma history (past trauma experienced, current distress related to past trauma, personal trauma reminders, perception of

personal trauma history on current foster parent role). These questions provide general background demographic information as well as information related to the variables of study (personal trauma history, exposure to traumatic material, and experience in the foster parent role).

The foster parent survey includes three additional questions regarding foster parent perception in the role as a caregiver of children who have experienced trauma. Question one (1) "I feel prepared to manage the emotional stress of my role as a foster parent" addresses foster parent perceived preparedness for emotional impacts associated with their current role and responsibilities. Preparedness for working with traumatized populations has been noted in prior literature to play a role in reducing the risk of developing STS symptoms in helping professionals (Administration for Children's Services, 2012; Caringi, Lawson et al., 2012; Dane, 2000).

Question two (2) "I feel that I have the support I need in my role as a foster parent" addresses foster parent perceived levels of current support from both personal and organizational resources. Support on multiple levels has been studied in relationship to the development of secondary trauma and other types of worker distress. Several studies have identified support as an important variable in mediating STS outcomes in helping professionals (Bride & Jones, 2006; Bride, Jones, & MacMaster, 2007; Manning-Jones et al., 2016).

Question three (3) "I take good care of myself" addresses foster parent perception of level of engagement in self-care activities. Several research studies have not found a correlation between self-care and STS outcomes in helping professionals (Bober & Regehr, 2006; Killian, 2008; Salloum et al., 2015). However, some evidence does indicate that self-care can have an impact on STS (Manning-Jones et al., 2016; Pryce et al., 2007). Additionally, STS training

curriculums often include the incorporation of self-care strategies in their models as methods to avoid or reduce the symptoms of STS (Child Welfare Trauma Training Toolkit, 2008; Hendricks, 2012; Newell & MacNeil, 2010).

These three additional survey items align with the stress process theoretical framework in that "personal and social resources to which people have access" are an important component in understanding how stress will be manifested (Pearlin, 1989, p. 254). The stress process model defined by Pearlin (1989) emphasized social support, mastery/self-esteem, and coping behaviors in understanding the impact of stress buffers on individuals (Wheaton, 2009). More current stress process framework models emphasize social resources (logistical, informational, emotional, social ties, social capital, and social integration) and personal resources (mastery, trust, self-esteem, flexibility, sense of coherence, hardiness, and forms of control) as being of primary importance in understanding the impact of stress (Wheaton, 2009). In studying perceived preparedness, this seeks to address foster parent feelings about the coping or personal resources and skills they have established and obtained to engage in their role. Emotional preparedness can also include aspects of role preparedness such as training and education to achieve a sense of skill mastery in caring for traumatized children and ultimately feeling more emotionally prepared. In studying perceived support, this will address foster parent feelings about the level of support they currently possess in their personal and social structures. And finally, studying perceived self-care will seek to address foster parent feelings about their ability to effectively engage in behaviors and practices which support their overall physical, emotional, and mental health. This relates to personal resources or coping resources in the stress process model. The combined survey instrument is included as Appendix C.

Chapter 4

Results

Several analyses will be conducted to address the research questions presented in this study of foster parents and STS. Descriptive analyses of foster parent demographics and role characteristics will first be conducted. Next, a descriptive analysis of the STSS scores will be conducted in addition to a reliability internal consistency analysis of the STSS instrument. Following, descriptive analyses of the model variables will be performed. Finally, regression analyses will be conducted with the research model stressor and stress buffer variables.

Analysis 1: Descriptive Analyses of Demographics and Role Characteristics

The first analysis involved a descriptive analysis of the demographic variables to provide information on the participant sample. The data were analyzed to develop an understanding of the characteristics of the survey participants by assessing each of the demographic variables of interest utilizing IBM SPSS statistical analysis software (Version 24). A review of the descriptive statistics of study participants is provided in the participant section of this paper. Age, gender, ethnicity, relationship status, socioeconomic status, employment status, and geographic location of study participants are described. Collected data on foster parent role characteristics were also analyzed including number of foster and other children in the home, age ranges of foster children in the home, prior parenting experience, and total number of foster children cared for. Foster parent role characteristic information is also included in the participant section of this paper.

Analysis 2: Descriptive Analyses of STSS Outcomes

A descriptive analysis of the data obtained from the STSS instrument assessing prevalence and severity of STS in survey participants was conducted. The STSS instrument

measures the prevalence of STS through an algorithm scoring approach based upon criteria of PTSD in the *DSM-5* (APA, 2013) following indirect exposure to trauma. The STSS measures severity of STS based upon a scale scoring with a threshold cutoff of 45. A detailed description of the STSS instrument including validation and scoring is provided in the instrument section.

Exposure, either directly or indirectly, is the first criterion required for a PTSD diagnosis (APA, 2013). The STSS does not include exposure criteria. According to Bride (2007), the instrument assumes that individuals being administered the scale have been exposed to traumatized populations through the course of their professional role. The scale is designed to be geared toward assessing indirect exposure to trauma in relation to a specific population. Additional survey questions were included to assess indirect trauma exposure given the limited research on STS in the foster parent population as well as the lack of utilization of this STSS instrument with foster parents. These questions specifically relate to indirect exposure to trauma in the normal course of the primary caregiver's foster parent role. The first question, "Have any of the foster children that are currently living in your home experienced a traumatic event at some point in their lives?" The respondents are provided with a dichotomous choice of "Yes" or "No" options. Most foster parents (n = 44, 88%) reported that they currently have a foster child in their home who has experienced a traumatic event. The mean STSS score for individuals currently caring for a foster child who has experienced trauma was 36.91 (SD = 11.95, Range = 22-74). The mean score for individuals indicating that their foster child did not experience a traumatic event was 27.83 (SD = 8.82, Range = 20-40). Scores on the STSS instrument can range between 20 and 100. No individuals in the latter group would qualify for the STSS cutoff score of 45 which would be consistent with their perceived lack of indirect exposure to trauma.

The second trauma exposure question provides a description of exposure by discussing ways an individual can be exposed to trauma, either directly or indirectly, based upon the wording for exposure in the *DSM-5* (APA, 2013) PTSD diagnostic criteria. The question, "In your role as a foster parent, are you ever exposed to the traumatic experiences of your foster children?" explores the participant's perception of exposure to trauma specifically related to their foster parent role. Participants are instructed to answer with a "Yes," "No," or "n/a (my foster child did not experience a traumatic event)." The n/a category was recoded to a "No" as these participants were also indicating no exposure due to not having a foster child in the home who had experienced trauma. Eighty-four percent of participants (n = 42), reported indirect exposure to trauma through experiences related to their foster child. The mean STSS score of participants reporting indirect exposure was 37.45 (SD = 12.09) and of participants reporting no exposure the mean score was 27.25 (SD = 6.25). The range of STSS scores for participants reporting no exposure was 20 to 37, again with no individuals in this category meeting the STSS cutoff criteria (See Table 2).

Table 2

STSS Scores and Exposure to Foster Children's Trauma (n = 50)

Exposure	*M*	*N*	*SD*	Min	Max	Range
Yes	37.45	42	12.09	22.00	74.00	52.00
No	27.25	8	6.25	20.00	37.00	17.00
Total	35.82	50	11.92	20.00	74.00	54.00

Participants also reported on ways, or media, through which they feel they are indirectly exposed to their foster child's traumatic experiences. Participants frequently reported exposure to

their foster child's trauma in more than one way, with 80% (*n* = 40) of participants indicating that they are exposed through two or more different media and 68% percent (*n* = 34) of participants indicating that they are exposed though three or more different media. Indirect exposure was perceived through several media: written reports (*n* = 27, 54%), caseworkers (*n* = 31, 62%), foster child (*n* = 34, 68%), court hearings (n = 35, 70%), foster child's counselor (*n* = 13, 26%), and other (*n* = 7, 14%). Foster parents noted additional kinds of exposure in the "other" category including birth parent/visit exchanges (*n* = 2), siblings of foster children (*n* = 1), other foster parents (*n* = 2), relatives of the foster child (*n* = 1), and initial placement pickup immediately following the traumatic event (*n* = 1). Twelve percent (*n* = 5) of participants reported not being exposed to their foster child's trauma in any way or not being exposed due to their foster child not having experienced a traumatic event. Two participants, in the comments section of the survey, indicated an uncertainty about whether their foster child had experienced trauma due to their young age. One participant noted, "We have only had one placement and the child is under the age of one. It is difficult to know the impacts of trauma in their life." The second participant noted, "Not sure if the baby had trauma? She was 6 months old when she came to our home. She was taken away from her nursing mother."

Following exposure, there are four symptom criteria clusters presented in the *DSM-5* (APA, 2013) for a PTSD diagnosis: Criterion B - intrusive symptoms, Criterion C – avoidance symptoms, Criterion D – negative alternations in cognition and mood, Criterion E – alterations in arousal and reactivity. Additionally, Criterion F addresses duration (disturbance greater than 1 month) and Criterion H – exclusion based on symptoms attributed to outside factors (substances or medical conditions). The STSS instrument addresses criterion B, C, D, and E. According to

Bride (2007), the STSS instrument measures the prevalence of STS due to indirect exposure to traumatic events with STS symptoms being defined as parallel to PTSD symptom criteria.

The STSS data were analyzed according to both the algorithm approach and the cutoff score approach to assess the frequency and severity of STS in study participants. The cutoff score approach utilizes a threshold point at which an individual is considered to have reached a clinically significant level of STS based upon the total instrument score. A cutoff score of 45 was utilized in the data analysis following the recommendation by Bride, with the 20-item revised STSS instrument (B. Bride, personal communication, June 11, 2015). The cutoff score is obtained by summing the total of all subscales (intrusion, avoidance, negative alterations in cognition and mood, and arousal and reactivity). On the STSS instrument, scores can range from 20 (no STS) to 100 (very high STS). Twenty percent of study participants (n = 10) met the cutoff score of 45 or higher on the STSS instrument which is indication of a moderate or higher level of STS. Total participant STSS scores ranged from 20 (no trauma) to 74. Based upon the cutoff score analysis, it is clear that some study participants are experiencing a moderate to high level of secondary traumatic stress symptoms and could potentially qualify for a PTSD diagnosis based upon indirect exposure to their foster child's traumatic experiences.

The total STSS mean score was 35.82 (SD = 11.92). The STSS also includes four subscales, intrusion, avoidance, negative alterations in cognition and mood, and arousal and reactivity. Intrusion subscale scores can range from five to 25. Participants had a mean intrusion subscale score of 10.76 (SD = 3.58). Total avoidance subscale scores can range from two to ten. Mean avoidance subscale scores were 2.98 (SD = 1.57). The mean cognition subscale score was 10.94 (SD = 4.10) and can range from seven to 35. The mean arousal subscale score was 11.14 (SD = 4.19) and scores can range from six to 30 (See Table 3). Comparison analyses of the

subscale scores cannot be conducted with previous STSS studies due to the changes in PTSD diagnostic criteria and resultant revision made to the STSS instrument.

Table 3

STSS Total and Subscale Scores

	Total STSS Score	Total Intrusion	Total Avoidance	Total Cognition	Total Arousal
Mean	35.82	10.76	2.98	10.94	11.14
Median	33.00	10.50	2.00	9.50	11.00
Std. Deviation	11.92	3.58	1.57	4.10	4.19
Range	54.00	14.00	7.00	16.00	17.00
Minimum	20.00	5.00	2.00	7.00	6.00
Maximum	74.00	19.00	9.00	23.00	23.00

The STSS data were also analyzed according to the algorithm approach. The algorithm approach looks at the specific number of criteria required to be met in each subscale in order to qualify for a PTSD diagnosis. According to Bride (2007) participants who report a three or higher on each statement are scored as qualifying for that particular symptom. Participants are asked to base their responses upon the last seven days. In the algorithm approach, based upon the requirements for PTSD symptom criterion in the *DSM-5* (APA, 2013), an individual must qualify for one of five intrusion symptoms, one of two avoidance symptoms, two of seven cognition and mood symptoms, and two of six arousal and reactivity symptoms in order to meet criteria for STS on the STSS scale. According to the algorithm approach, 82% of participants (n = 41) met one of the four criteria of a PTSD diagnosis (intrusion, avoidance, negative alterations in cognition and mood, or arousal and reactivity), 50% of participants (n = 25) met at least two criteria, 26% (n = 13) met at least 3 criteria, and 12% (n = 6) met criteria for all four subscales.

This approach indicates a lower percentage of participants that would potentially qualify for a PTSD diagnosis through indirect exposure than the clinically significant threshold cutoff score approach with 20% of participants qualifying in that scoring method. The algorithm approach links specifically with meeting all aspects of PTSD criteria to determine prevalence while the cutoff score approach reflects severity of symptoms associated with STS. The algorithm approach also allows for the analysis of each subscale/criterion to assess the frequency of each specific criterion. Seventy-six percent (n = 38) of participants met intrusion criteria (1 of 5 symptoms endorsed 3 or higher) representing a sizeable number of study participants. Results for the avoidance subscale indicate that twenty-two percent (n = 11) of participants met required criteria (1 of 2 symptoms endorsed 3 or higher). Twenty-four percent (n = 12) met criteria for the negative alterations in cognition and mood subscale (2 of 6 symptoms endorsed 3 or higher) and forty-eight percent (n = 24) met criteria for the arousal subscale (2 of 7 symptoms endorsed 3 or higher). These results indicate that the intrusion subscale reflects common experience for foster parents, and the arousal subscale also captures experience for a notable group within this sample. Results for the Avoidance and Arousal subscales indicate far less prevalence of these symptoms in comparison to the other two symptom clusters. Additionally, the results of both the cutoff score approach and the algorithm approach were compared. Ten percent (n = 5) of study participants qualified for both the cut off score approach and the algorithm approach.

It should also be noted that nine additional individuals completed the STSS but were excluded from the analysis due to not meeting one or more aspects of study inclusion criteria. Notably, two of these individuals (22%) also had qualifying scores above the 45 threshold. Based upon demographic data, it appears that these two individuals were former foster parents but are no longer licensed foster parents and that one individual is currently an adoptive parent.

Analysis 3: Reliability Internal Consistency Analysis of STSS

The third analysis addresses the adapted STSS instrument. The measure notes that "'client' is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, and so forth" (Bride, Robinson et al., 2004, p. 13). In this study, "foster child" is substituted in place of client in the STSS instrument. This adapted foster parent instrument was assessed for internal consistency reliability utilizing a Cronbach's alpha calculation with SPSS software. Cronbach's alpha coefficient assesses items on the measure to indicate their strength in focusing on a particular construct (Cronbach, 1951). Acceptable alpha coefficients are generally reported to range between .70 and .95 though alphas (> .90) could indicate redundancy and that a measure could be condensed (Tavakol & Dennick, 2011). For the revised 20-item STSS instrument (adding 4 new items and removing the "foreshortened future" item) Bride reports an alpha of .93 (N = 633) (B. Bride, personal communication, Oct 9, 2013). The original STSS instrument demonstrated discriminant, convergent, factor validity and internal validity in previous studies (Bride, Robinson et al., 2004; Ting et al., 2005). Utilizing a Cronbach's alpha statistic with SPSS software to test the adapted STSS for reliability, an alpha of .93 was obtained indicating high internal consistency of the overall measure in assessing the STS construct. Means, standard deviation, and alpha levels for the STSS and each of its subscales are as follows: Total STSS (M = 35.82, SD = 11.92, α = .93), intrusion (M = 10.76, SD = 3.58, α = .70), avoidance (M = 2.98, SD = 1.57, α = .64), negative alterations in cognition and mood (M = 10.94, SD = 4.10, α = .84), arousal and reactivity (M = 11.14, SD = 4.19, α =.82). All subscales fall in the acceptable range of .70 and .95 except the avoidance subscale which is slightly lower than desired. Taylor and Dennick (2011) indicate, "A low value of alpha could be due to a low

number of questions, poor interrelatedness between items or heterogeneous constructs" (p. 54). The avoidance subscale contains just two items which helps to explain the lower value in this subscale which could result in an underestimation of reliability and may not provide an accurate analysis. Given the overall alpha (.93), three subscales falling within the acceptable range, as well as the fourth subscale being very close to the acceptable range and likely lower due to the limited number of items, it appears that the adapted STSS measure demonstrates overall good internal consistency within the subscales and good internal consistency in addressing the overall STS construct.

Analysis 4: Descriptive Analyses of Model Variables

A descriptive analysis was conducted of the identified stressor variables (foster parent personal trauma history, frequency of exposure to foster child's trauma, and foster parenting experience), and the identified stress buffer variables (perceived support, perceived emotional preparedness, and perceived self-care).

Personal trauma history (Stressor). Personal trauma history was identified as a variable of interest in understanding the prevalence and severity of STS in foster parents. Some prior research on child welfare professionals as well as other helping professionals indicated a strong relationship between STS and identifying as having a personal history of trauma (Bride, Jones, & MacMaster, 2007; Cornille & Meyers, 1999; Nelson-Gardell & Harris, 2003).

For this stressor variable, foster parents were asked to respond to the statement, "In my own life, I have experienced or witnessed a traumatic event that significantly impacted me," on a Likert type scale ranging from strongly disagree to strongly agree or n/a. Participant scores were coded with a one if they indicated strongly disagree or disagree and a two if they indicated strongly agree or agree to classify this stressor variable into a dichotomous variable for the

analyses. Three participants identified "n/a – not applicable" indicating that the question did not apply to them. These participants were coded with a one as they did not indicate positively that they felt they were significantly impacted by a prior traumatic event. Participants reporting agree or strongly agree were considered to report having experienced a traumatic event at a level that they felt had a significant impact on them. Though it is indicated that half of all women and 60% of all men will experience a traumatic event at some point in their lives, most will be able to recover and move forward without significant difficulty (NCPTSD, 2012). The lifetime risk for PTSD according to the *DSM-5* (APA, 2013) is only 8.7%. Not all traumatic events, experienced or witnessed, are perceived as traumatic by individuals and would not necessarily be indicative of an individual's perception of having a personal trauma history. For this reason, participants were asked to report on whether they felt they were significantly impacted by a traumatic event in their past rather than simply whether they experienced a traumatic event or not. Those indicating strongly agree or agree are defined as reporting a personal trauma history for the purposes of this study. Those indicating disagree or strongly disagree or not applicable are designated as not reporting a personal trauma history for the purposes of this study.

A majority of participants (n = 36, 76%) agreed or strongly agreed that they had experienced or witnessed a personal traumatic event that significantly impacted them at some point in their lives. The percentage of foster parents who indicated experiencing a traumatic event at some point in their lives is much higher than reported in the general population. Seventy-five percent of male foster parents (n = 6) and 71% of female foster parents (n = 30) reported a trauma history. Mean STSS scores of participants reporting no personal trauma history was 39.14 (SD = 9.65) and those reporting having a trauma history 34.52 (SD = 12.57).

Foster parents with a personal trauma history, on average, had lower STSS scores than foster parents with no trauma history.

In addition to the stressor variable addressing the presence of a personal trauma history, additional data were collected to develop a greater understanding of the impacts of a personal trauma history in the foster parent role. Foster parents were asked to respond to several statements related to their personal trauma history. Participants were given the options "strongly disagree," "disagree," "agree," "strongly agree," or "n/a not applicable." The not applicable category was offered as an option to participants that did not feel the item applied to them likely due to earlier reporting that they did not have a trauma history and thus could not answer the item. Participants were asked if their personal traumatic life experiences helped prepare them for their role as a foster parent. Ten respondents (20%) indicated that the question did not apply to them. Of the 40 remaining participants, 28 (70%) felt that their personal trauma history helped to prepare them for their foster parenting role. A separate item asked about negative impacts of personal trauma history, "My personal traumatic life experiences have negatively impacted my role as a foster parent." Only one participant (2%) indicated "strongly agree" or "agree" to this statement. Participants were also asked to report on whether hearing or thinking about their foster child's trauma caused them to be reminded of their own trauma history. Nine participants reported not applicable. Of the 41 remaining participants, 28% (n = 14) indicated being reminded of their own trauma through their experiences in their foster parent role. Additionally, foster parents were asked whether they feel distressed when reminded of their own trauma. Nine participants reported not applicable. Of the 41 remaining participants, 12% (n = 6) indicated feeling distress when reminded of their own personal trauma history. Based upon this additional data, it appears that a large majority of foster parents perceive their own personal trauma history

in a positive light in relationship to their foster parent role even though some may be reminded of their own trauma history and feel some level of distress when thinking about it.

Frequency of exposure to trauma (Stressor). Frequency of indirect exposure to foster children's traumatic experiences was identified as a variable of interest in understanding the severity of STS in foster parents. One aspect of the *DSM-5* (APA, 2013) PTSD exposure criteria indicates that "Repeated or extreme indirect exposure to aversive details of the event(s), usually in the course of professional duties" is one means towards developing symptoms of a PTSD diagnosis. Prior STS studies of child welfare professionals have indicated the relationship between frequency or amount of indirect exposure to trauma in their professional roles and the development of STS (Bride, Jones, & MacMaster, 2007; Cornille & Meyers, 1999; Regehr et al., 2004).

Table 4

Frequency of Exposure to Foster Child Trauma and Mean STSS Scores (N = 50)

Exposure	*n*	%	*M*	*SD*	MIN	MAX	RANGE
Never	8	16	29.75	7.21	20	37	17
Once a year	2	4	39.50	9.19	33	46	13
A few times a year	7	14	32.00	8.22	22	47	25
Once a month	4	8	32.75	15.20	23	55	32
Once a week	6	12	34.67	8.43	25	46	21
Daily	23	46	39.61	13.91	22	74	52

For this stressor variable, participants were asked to indicate how frequently they are indirectly exposed to their foster child's trauma. Nearly half (n = 23, 46%) of foster parents perceived that they are indirectly exposed on a daily basis to their foster child's trauma and an

additional 12% reported indirect exposure once per week or more. The mean STSS score of participants reporting daily exposure to trauma was 39.61 (*SD* = 13.91) and those reporting no exposure had a mean score of 29.75 (*SD* = 7.20). However, participants reporting exposure once a year had a mean score similar to those who reported daily exposure (*M* = 39.50, *SD* = 9.19). In every category except "never" there were foster parents who met cutoff score criteria of 45 (Table 4).

Foster parenting experience (Stressor). The length of time that a foster parent engages in their role was identified as a variable of interest in understanding the prevalence and severity of STS. One area of interest in child welfare research on STS has been on whether years of experience in the field helps to mitigate the impacts of STS. It was thought that seasoned child welfare workers may, through experience, become better at handling the stressors associated with working alongside traumatized children and their families. Prior child welfare research studies have obtained varying results on the subject of longevity and the prevalence and severity of STS with some reporting that lack of experience was indicative of higher levels of STS (Elwood et al., 2011) and others reporting that years of experience was not associated with the likelihood of developing STS (Bride, Jones, & MacMaster, 2007; Cornille & Meyers, 1999; Nelson-Gardell & Harris, 2003). Salloum et al. (2015) found higher levels of STS in child welfare case managers with more experience.

For this stressor variable, participants were asked to indicate how many years they had been a foster parent. Results are provided in Table X. Foster parent years of experience in their role ranged from just starting out in their first year (*n* = 20, 40%) to foster parenting for ten or more years (*n* = 1, 2%). Nearly three-fourths of participants have been foster parenting for three

years or less (*n* = 37, 74%). STSS scores meeting cutoff criteria can be evidenced in all foster parent age groups except those with eight or more years of experience (Table 5).

Table 5

Years of Foster Parenting and Mean STSS Scores (n = 50)

Years	*M*	*N*	%	*SD*	Min	Max
0-1	35.25	20	40	12.35	20	65
2-3	35.29	17	34	13.47	20	74
4-5	42.00	6	12	9.27	32	56
6-7	33.00	4	8	8.76	27	46
8-9	40.00	2	4	.00000	40	40
10+	22.00	1	2	.	22	22

Perceived support (Stress buffer). Support in a variety of contexts has frequently been identified in the literature to help mediate the effects of working with traumatized populations. Several studies have found lower levels of STS in individuals who reported greater levels of support, organization or personal (Bell, Kulkarni, & Dalton, 2003; Caringi, Lawson et al., 2012; Regehr et al., 2004). Support has also been noted in the literature to be an important aspect of role satisfaction for foster parents (Rehnquist, 2002; Rhodes et al., 2001). As a result, perceived support was identified as a potential stress buffer variable.

Participants were asked to rate the statement, "I feel that I have the support I need in my role as a foster parent of traumatized children," on a Likert type scale ranging from strongly disagree to strongly agree or n/a (not applicable). Support was not defined but rather left up to the individual to determine their perception of the types of support needed in their foster parent

role and whether they feel that they have what they need presently. Sixty-two percent of participants either agreed or strongly agreed to this statement. Foster parents who reported higher levels of support had lower mean STSS scores as is consistent with the literature on support and STS (Table 6). A few participants commented on support in the final comments section. Two participants noted the need for greater support and resources available to address the children's trauma. Another participant noted the need for optional counseling to be available to foster parents.

Table 6

Foster Parent Perceived Support and Mean STSS Scores (n = 50)

Feel supported	*N*	*M*	%	*SD*	MIN	MAX
Strongly Disagree	5	44.40	10	8.76	40	60
Disagree	14	42.57	28	15.07	22	74
Agree	19	32.47	38	9.44	20	56
Strongly Agree	12	29.67	24	6.20	20	40

Perceived emotional preparedness (Stress buffer). Feeling prepared to engage in the foster parent role was identified as the second stress buffer variable of interest. A limited amount of prior research on helping professionals and STS has addressed the aspect of being prepared emotionally to engage in the role of working with traumatized individuals (Caringi, Lawson et al., 2012; Dane, 2000). Feeling prepared in aspects such as receiving adequate training and education for the role as well as developing an understanding of the emotional impacts associated with working with traumatized individuals (Caringi, Lawson et al., 2012; O'Halloran

& O'Halloran, 2001) have been noted to have a positive impact of the severity of STS in helping professionals.

For this variable, foster parents were asked to rate the statement, "I feel prepared to manage the emotional stress of foster parenting traumatized children," on a Likert type scale ranging from strongly disagree to strongly agree or n/a (not applicable). One participant reported an n/a. Seventy-two percent of participants (n = 36) reported that they feel emotionally prepared to manage the emotional stress associated with the role of parenting traumatized children. However, over a quarter of participants (n = 26) did not feel as if they were emotionally prepared for the role. Participants who indicated "agree" or "strongly agree" had lower mean STSS scores than participants who reported "strongly disagree" or "disagree" indicating that perceived preparedness appears to be connected to less severity in STS outcomes (Table 7). Interestingly, the one participant who indicated an n/a (not applicable) on this item had an STSS score above the cutoff threshold. For the later regression analyses, the n/a response for this item was treated as missing data as it could not be categorized as an agree or disagree.

Table 7

Foster Parent Perceived Emotional Preparedness and Mean STSS Scores (n = 49)

Preparedness	*M*	*N*	%	*SD*	MIN	MAX
Strongly Disagree	42.00	1	2	.	42	42
Disagree	43.92	12	24	14.76	28	74
Agree	34.00	22	44	11.48	20	56
Strongly Agree	30.57	14	48	5.60	23	40
Not Applicable	46.00	1	2	.	46	46

At the end of the survey, several participants commented on preparedness both positively and negatively. Two participants indicated feeling prepared due to their own professional training and one due to personal life experiences. Other participants reported feeling unprepared with knowledge and skills required to parent traumatized children. Additionally, others reported the emotional toll of parenting a traumatized child. One participant noted changing from an extrovert to an introvert and having to quit working due to the emotional strain. Another participant stated, "It's hard to know what to do to help them and you start to feel like you're failing." One participant also indicated, "Even though we had read books and taken classes provided by our adoption agency, my husband and I have felt completely unprepared for actually parenting a traumatized child."

Perceived self-care (Stress buffer). Self-care is the third stress buffer variable of interest. A limited amount of research appears to have addressed self-care in relation to STS. Several STS studies have not found a relationship between self-care and STS in helping professionals (Bober & Regehr, 2006; Salloum et al., 2015). However, anecdotal reports and training curricula frequently incorporate self-care as an important component in addressing STS in child welfare professionals as well as foster parents (Conrad, 2004; NCTSN, 2010; Pryce et al., 2007).

In the measurement of this stress buffer variable, foster parents were asked to rate the statement, "I take good care of myself," on a Likert type scale ranging from strongly disagree to strongly agree or n/a (not applicable). Participants were not provided with parameters regarding what constitutes good self-care but rather were asked to rely on their personal perception of what is needed to take good care of themselves and whether they engage in this process. Most foster parents (n = 44, 88%) indicated that they take good care of themselves. Only 6 participants felt

that they struggled with self-care and these participants had higher mean STSS scores than those who felt they did engage in good self-care. However, participants meeting the threshold cutoff score of 45 are evidenced in all levels of perceived self-care (Table 8).

Table 8

Foster Parent Perceived Self-Care and Mean STSS Scores (n = 50)

Preparedness	*M*	*N*	*%*	*SD*	MIN	MAX
Strongly Disagree	47.00	1	2	.	47	47
Disagree	42.00	5	10	15.75	24	60
Agree	36.72	32	64	12.20	20	74
Strongly Agree	29.92	12	24	7.37	20	46

Analysis 5: Correlation Analysis of Model Variables

Following a review of the descriptive statistics of the identified stressor and stress buffer variables, bivariate correlations were calculated between the selected stressors (frequency of exposure to foster child's trauma, personal trauma history, years of foster parenting experience), the selected stress buffers (perceived support, perceived emotional preparedness, and perceived self-care) and the severity of STS scores. Severity of STS (dependent variable) was analyzed in relation to the stressors (independent variables) and stress buffers (independent variables) to identify their association.

A preliminary correlation matrix was created utilizing SPSS Pearson's correlation index (See Table 9). In the preliminary analysis, it was determined that the dependent variable (Total STSS score) was positively skewed ($\gamma_1 = 1.128$, $SE = .337$). A boxplot analysis identified two STSS outlier scores, which exceeded 1.5*Inter Quartile Rage. The inclusion of outliers in data

analysis can "increase error variance and reduce statistical power of tests" as well as "decrease normality," "violate assumptions," and alter findings (Wefald, Katz, & Downey, 2010, p. 3). As a result, these two outlier scores were excluded from the regression analyses but still remain in the descriptive analyses.

Additionally, a review of the preliminary correlation analysis indicated that two of the independent stress buffer variables were highly correlated. Emotional preparedness and support were correlated at (r = .756, p < .01). The correlation between these two variables presented challenges in estimating significance in the research model (See Table 9).

Table 9

Preliminary Bivariate Correlation Matrix of Model Variables

	STSS	Exposure	Experience	Trauma	Support	Prepared	Self-Care
STSS							
Exposure	.291*						
Experience	-.006	.237					
Trauma	-.176	.018	-.032				
Support	-.464**	-.261	-.263	.031			
Prepared	-.404**	-.208	-.126	-.115	.756**		
Self-Care	-.329*	-.177	-.086	-.042	.444**	.403**	-

Note. ** = p < .01, * = p <.05, STSS = Secondary Traumatic Stress Scale

Support has been frequently identified in the literature as an important component to reduce the severity of STS in helping professionals (Bride, Jones, & MacMaster, 2007; Choi, 2011; Manning-Jones et al., 2016). It is also a more common and familiar concept in child welfare than emotional preparedness. Emotional preparedness has some support in the literature

as a buffer of STS, however, research studies are more limited on this subject (Caringi, Lawson et al., 2012; O'Halloran & O'Halloran, 2001; Zurbriggen, 2011). Emotional preparedness may also be more difficult for foster parents to conceptualize than support.

Consequently, the decision was made to remove "Emotional Preparedness" from the research model. Table 10 includes the bivariate correlation matrix of the revised research model. A significant negative correlation is noted between total STSS score and personal trauma history (r = -.311, p < .05) indicating that higher STSS scores are associated with lower reported trauma history. A significant negative correlation was also evidenced between perceived self-care and total STSS score (r = -.383, p < .01) indicating that as perceived self-care decreases, STSS scores increase. The relationship between perceived support and total STSS score (r = -.459, p < .01) was also negatively significant indicating that higher levels of support are associated with lower levels of STS.

Table 10

Correlation Matrix of Model Variables

	STSS	Exposure	Experience	Trauma	Support	Self-Care
STSS						
Exposure	.235					
Experience	.055	.237				
Trauma	-.311*	.018	-.032			
Support	-.459**	-.261	-.263	.031		
Self-Care	-.383**	-.177	-.086	-.042	.444**	-

Note. ** = p < .01, * = p < .05, STSS = Secondary Traumatic Stress Scale

Analysis 6: Regression Analysis of Research Model

The sixth analysis conducted, sought to identify the degree to which a combination of selected stressor and selected stress buffer variables explain the severity of STS in foster parents. A hierarchical multiple regression model was utilized to first analyze the combined three stressor variables (personal trauma history, frequency of exposure to trauma, and years of foster parenting experience), with the added two stress buffer variables (perceived support, and perceived self-care) in relation to the severity of STS. The overall model summary is provided in Table 11. Model 1 was not significant with the combined three stressor variables alone (R^2_{adj} = .093, p = .063). When the combined two stress buffer variables were added in Model 2, the model became significant in explaining 37% of the variance of STS outcomes (R^2 = .365, p < .01). Utilizing the more conservative adjusted R squared, model two explains 29% of the variance of STSS with the combined three stressors and the combined two stress buffers. With the inclusion of the two stress buffer variables, there was an R square change of .213.

Table 11

Regression Analysis Model Summary

Model	*R*	*R²*	*Adj. R²*	*SE*	*R²* Change	*F* Change	*df1*	*df2*	*Sig. F* Change
1	.389[a]	.151	.093	9.376	.151	2.615	3	44	.063
2	.604[b]	.365	.289	8.303	.213	7.055	2	42	.002

The hypothesized research model for this study which includes the combined three stressor variables of personal trauma history, foster parent experience, and frequency of exposure and the combined two stress buffer variables of perceived support and perceived self-care

demonstrated significance in supporting our understanding of a combination of factors that impact the severity of STS outcomes.

In analyzing the coefficients of Model 1 (personal trauma history, frequency of exposure, and years of foster parenting experience), one stressor variable, personal trauma history, emerged as demonstrating significance ($\beta = -.310$, $t = 2.234$, $p < .05$) in explaining variability in STSS (See Table 12). Adding the two stress buffer variables in Model 2 slightly increased the significance of personal trauma history ($\beta = -.303$, $t = -2.458$, $p < .05$) in explaining STS as well as indicated significance of one stress buffer variable, perceived support ($\beta = -.338$, $t = -2.341$, $p < .05$), in explaining the severity of STS. Personal trauma history and perceived support emerged as two predominant variables in explaining severity of STS in foster parents (Table 12).

Table 12

Research Model Coefficients

	Model 1			Model 2		
	β	t	Sig.	β	t	Sig.
Exposure to Trauma	.236	1.643	.107	.140	1.079	.287
Years of Experience	-.013	-.091	.928	-.105	-.799	.429
Personal Trauma	-.310	-2.234	.031	-.303	-2.458	.018
Perceived Support				-.338	-2.341	.024
Perceived Self-Care				-.230	-1.659	.105

Model 1 Adjusted $R^2 = .093$, $\Delta R^2 = .151$

Model 2 Adjusted $R^2 = .289$, $\Delta R^2 = .213$

Analysis 7: Regression Analysis of Interaction Model

An additional regression analysis was conducted to assess a combination of the two significant variables that emerged (personal trauma history and support) in explaining severity of STS as well as the interaction effects these two variables have in mediating STS (See Table 13). Personal trauma history together with perceived support, demonstrated a high level of significance in explaining the variability of STS in foster parents (R^2 = .262, F = 9.353, p < .01). An interaction term was created utilizing the cross product of personal trauma history and perceived support to conduct a hierarchical regression analysis. Due to the high correlation between these two variables and the created interaction variable, the variables were transformed into new variables for the interaction analysis. The two independent variables demonstrating significance in the model (support and personal trauma history) were transformed by computing the mean for each variable, and then for each of these two independent variables, a corresponding variable was created by subtracting the mean from the score for each participant. Each new score is the difference between the original participant score and the overall mean for that independent variable. An interaction variable was then created by multiplying the scores of the two transformed independent variables for each participant.

A regression analysis was conducted with the two transformed variables and the added interaction variable (cor_support X cor_trauma history). Adding the interaction variable into the model demonstrated no significant interaction effects between these two predictor variables (ΔR^2 = .002, R^2 = .247, ΔF = .106, p = .746). The interaction effects of personal trauma history and support did not increase significantly the explained variability in STS (Table 13).

Table 13

Model Summary Interaction Variables Personal Trauma History X Support

Model	*R*	R^2	*Adj.* R^2	*SE*	R^2 Change	*F* Change	*df1*	*df2*	*Sig. F* Change
1	.542[a]	.294	.262	8.458	.294	9.353	2	45	.000
2	.543[b]	.295	.247	8.544	.002	.106	1	44	.746

a. Predictors: (Constant), Cor_support, Cor_Trauma hx

b. Predictors: (Constant), Cor_support, Cor_Trauma hx, Cor_supportXCor_Trauma hx

c. Dependent Variable: Total STSS Score

Chapter 5

Research Question Analyses

The purpose of this study was to examine STS prevalence and severity among foster parents as well as to identify the association between stressor and stress buffer variables and STS outcomes. The goal of this study was to answer three research questions. Following an analysis of the data, each of the questions are addressed in this sections.

Research Question 1

What is the frequency and severity of STS for foster parents who care for traumatized children? Though research on STS in the child welfare field has increased in recent years, the inclusion of foster parents in these studies had not been observed. STS can reportedly have deleterious effects on the child welfare professional and significantly impact their ability to engage in their professional role (NCTSN, 2011). Consequently, developing an understanding of the prevalence and severity of STS in foster parents is an important aspect of child welfare research.

The results of this study indicated a small, but clinically significant minority of foster parents to be experiencing clinically high levels of secondary traumatic stress. Of the participants in this study, 12% met qualifying criteria for a PTSD diagnosis through indirect exposure to their foster child's trauma and 20% were found to be experiencing moderate to severe levels of STS. These findings are consistent with reported prevalence rates of 6-26% of counselors working with traumatized populations (NCTSN, 2011) as well as Bride's (2007) study of social workers which found 15% of social workers to be experiencing STS. However, higher levels of STS have been consistently reported in child welfare professionals. Sprang et al. (2011) found that child welfare professionals were at a much greater risk of developing STS than other helping

professionals. Salloum et al. (2015) found 29% of case managers and supervisors, Bride, Jones, and MacMaster (2007) found 34% of child protection workers, Cornille and Meyers (1999) found 39% of child protection workers, and Caringi and Hardiman (2012) found 50% of child protection staff to be experiencing a clinically significant level of STS consistent with a diagnosis of PTSD. Case managers and their supervisors appear to have slightly lower levels of STS than child protection worker studies based upon these findings.

Though foster parents and child welfare professionals both interact with the same population group, abused and neglected children and youth, the findings of this study suggest that there are some aspects of the foster parent role that help to reduce their risk of experiencing STS. Nonetheless, the potential for STS in the foster parent population similar to that of helping professionals has also been evidenced in this study.

Fifty-eight percent of participants in the study reported that they are indirectly exposed to trauma on a daily or weekly basis in their role as a foster parent and 84% of foster parents reported currently caring for one or two foster children. In comparison, child welfare professionals frequently have high caseloads of traumatized children where they are likely exposed on a near daily basis to traumatic material. Frequency and severity of indirect exposure as well as caseload size has been noted in some studies to be an influential factor in the severity of STS (Bober & Regehr, 2006; Bride, Jones, & MacMaster, 2007; Regehr et al., 2004). Difference in amount and kinds of indirect exposure between foster parent roles and child welfare professional roles could have an impact on the lower levels of severity of STS outcomes observed in foster parents.

Additionally, the subscale avoidance criterion was only met by 22% of study participants. The foster parent role is unique in that their role is not limited to a certain number of hours per

week with distinct lines between personal and work contexts. The foster parent serves in a full-time, constant capacity. Avoidance of trauma reminders for helping professionals may be able to be more easily grasped and quantified than for a foster parent who has no separation from the role. Consequently, the foster parent may not see avoidance as an option or appropriate behavior. The measure may also struggle to capture avoidance in foster parent caregivers as it is primarily directed toward individuals who work with traumatized populations in an employment capacity. These lower scores in the avoidance symptom cluster can also help to explain the difference in the percentage of individuals who meet PTSD qualifying criteria (12%) versus those whose overall symptom scores are at or above the moderate STS cutoff score (20%).

Specific comparison analyses with prior child welfare professional studies cannot be made as there are no published studies available utilizing the revised STSS and its alignment with the *DSM-5* (APA, 2013) diagnostic criteria for PTSD. Significant changes were made to the avoidance symptom cluster and the revised STSS instrument now has only two questions related to the avoidance symptoms. The original instrument had seven items related to avoidance (Bride, Jones, MacMaster, 2007). However, the findings of this study do provide indication of STS in the foster parent population with a frequency consistent to other helping professionals but lower when compared specifically to child welfare professionals. A portion of foster parents are impacted through indirect exposure to their foster child's trauma such that clinically significant levels of STS can be evidenced in a small minority of this population. Of significance to note is that 82% of study participants qualified to meet at least one of the criteria for PTSD and half met two qualifying criteria. These results support the need for further research to better understand STS symptoms in foster parents in order to be able to effective provide the support and resources they need to positively impact STS outcomes.

Research Question 2

What is the association between selected stressors (number of years of foster parenting, exposure to foster child's traumatic events, and personal foster parent trauma history), selected stress buffers (perceived support, perceived preparedness, and perceived self-care), and the severity of STS in foster parents? Stress process theory emphasizes the value of considering stressors not only in relationship to stress outcomes, but also in relationship to each other. The potential for positive or negative cumulative or interacting effects are noted in the stress process theory literature (Menaghan, 2010). In the regression analysis, including the three stressor variables (personal trauma history, years of foster parenting experience, and frequency of exposure to trauma) in Model 1 provided an opportunity to assess the role of all three stressors combined (past and present) in explaining STS. The overall model did not demonstrate significance in explaining STS outcomes ($p = .06$, $R^2_{adj} = .093$). Only one stressor variable emerged as significant from the three stressor variables in model 1. Interestingly, personal trauma history was significantly negatively correlated with secondary trauma scores. This finding differs from the majority of prior child welfare professional research findings which indicate that having a personal trauma history increases the risk of STS. Foster parents with no personal trauma history had higher STSS scores than foster parents with a personal trauma history. As Pearlin (1989) noted in stress process theory, some stressors may interact with other stressors in both positive and negative ways. The negative significance of personal trauma history may impact exposure to trauma as well as lack of experience in the role such that they are insignificant in the overall model.

Additionally, the majority of foster parents reported having a personal trauma history (76%), providing only a small subsample of participants who did not experience personal

trauma. However, 70% (n = 28) of foster parents in the study who indicated having a personal trauma history also indicated that their personal traumatic life experiences helped to prepare them for their role as a foster parent. Only 2% (n = 1) of foster parents indicated that their personal trauma history negatively impacted their role as a foster parent. As Pearlin (1989) indicates, perception of the stressors and value placed upon them can make a difference in their impact. Perhaps personal trauma history might be categorized as a stress buffer for foster parents in that they feel it helps to prepare them for the role whereas foster parents without a trauma history may not feel as prepared to manage the emotions associated with traumatic events. Foster parents with a personal trauma history may also have previously received psychoeducation or psychotherapy to work through their personal traumatic experiences and consequently feel less stress associated with their foster child's trauma. Further research exploration of this variable in foster parents could provide greater clarity on the negative correlation of personal trauma history observed in this study. Caringi and Hardiman (2012) conducted individual qualitative interviews as a part of their broader quantitative study of STS and child welfare professionals. Workers reported that their own trauma histories in the context of their professional roles were "difficult at times, but also positive since it led to increased empathy for clients' experiences" (p. 54). Workers in the study also noted that they felt personal trauma history had a negative impact on colleagues. In this study of foster parents, it is also evident that most foster parents felt that their personal trauma histories had a positive impact on their role.

Model 2 with the two remaining added stress buffers (support, preparedness, and self-care) accounted for 29% of the variance in STS outcomes ($p < .01$, $R = .365$, $R^2_{adj} = .289$) indicating the potential of the added stress buffers, along with the stressors to significantly explain a portion of the variance in STS outcomes, aligning with stress process theory and the

research hypothesis model for this study. In Model 2, both personal trauma history (p = .018) and perceived support (p = .024) emerged as important explanatory variables. Support is a key stress buffer identified in stress process theory and is noted to have an impact on stress outcomes (Pearlin, 1989). While specific types of support desired by foster parents was not studied, it was evident that feeling supported has an impact on the severity of STS outcomes. It is also important to note that 38% of foster parents did not feel that they currently have the support they need in their role of parenting traumatized children.

One stress buffer, emotional preparedness, was excluded from the analyses as a result of its high correlation with support. Pearlin (1989) indicates an intersecting relationship between the two prevalent stress buffers in the stress process model, coping and social support, but also notes that they can be also be distinguished in some ways. Given that neither perceived support (social support buffer) nor perceived emotional preparedness (coping buffer) were defined in the survey, the constructs may have been difficult for the participants to differentiate between the two. As a result of the high correlation, emotional preparedness was not able to be assessed within the study model.

Research Question 3

To what degree does a combination of stressors and stress buffers explain the severity of STS in foster parents? Following the regression analyses with Model 1 (personal trauma history, foster parent experience, and frequency of exposure) and Model 2 (Model 1 + support, emotional preparedness, and self-care), it is apparent that the research hypothesis model, the combined stressor variables and the combined stress buffer variables, helps to explain 29% of the variance of STS outcomes in foster parents (R^2 = .365, R^2_{adj} = .289, $p < .01$). Both perceived support and

personal trauma history emerged as strong variables in the model ($p < .05$) and are negatively correlated with STS.

To understand the relationship between personal trauma history, support and STS outcomes as well as the interaction between support and personal trauma history in relationship to STS outcomes, a regression analysis with the interaction model was analyzed. Model 1, (support and personal trauma history) was highly significant ($p < .001$, $R^2_{adj} = .262$) indicating that support together with personal trauma history contribute to our understanding of STS outcomes in foster parents. Higher levels of perceived support and a reported personal trauma history have a positive impact on lower levels of STS. The interaction between support and personal trauma history, however, did not demonstrate significance ($\Delta R^2 = .002$, $R^2 = .247$, $\Delta F = .106$, $p = .746$) in further explaining the variance of STS outcomes. Foster parents who feel supported, and who perhaps have a closer connection to trauma due to their personal experiences, may experience some buffering of the negative STS outcomes, but support and personal trauma history do not have any interacting effects on STS.

Chapter 6

Discussion

The purpose of this study was to identify the prevalence and severity of STS in foster parents as well as to explore factors which may contribute to STS outcomes in this population. Utilizing stress process theory as a framework and prior child welfare STS studies to guide the selection of specific variables, a research model was developed to answer the questions of this study. The first question addressed the question of the prevalence and severity of STS in foster parents. This question was proposed for study due to the consistent findings of STS in child welfare professionals as well as others engaged in working within this field such as attorneys, juvenile justice workers and trauma counselors. It was also evident that the STS concept has been utilized in foster parent trainings and informational materials without research on STS specific to this population. The findings of this study confirmed the prevalence of STS in the foster parent population consistent with prevalence rates of helping professionals in prior studies. However, prevalence rates were found to be lower in this study in comparison to child welfare professional studies. Twenty percent of foster parents in this study were found to be experiencing moderate to severe levels of STS and 12% were found to have STS symptoms consistent with a PTSD diagnosis as a result of indirect exposure to their foster child's trauma.

The second research question sought to develop a deeper understanding of factors associated with the severity of STS outcomes in foster parents. Guided by stress process theory and child welfare research studies, a combination of three stressor variables was selected for this study: personal trauma history of the foster parent, experience in the foster parent role, and frequency of indirect exposure to the foster child's trauma. A combination of three stress buffer variables was also selected for this study: perceived support, perceived emotional preparedness,

and perceived self-care. In alignment with Pearlin's (1989) stress process theory's framework of assessing combined stressors and combined stress buffers (past and present in the context of the social environment) in relationship to stress outcomes, a research model was developed to assess the combination of these variables of interest. Though one stress buffer, emotional preparedness, had to be eliminated from the analysis due to a high correlation with another stress buffer, support, the overall research model proved beneficial in explaining 29% of the variance in foster parent STS outcomes. The combination of personal trauma history (negatively correlated), foster parent experience, and frequency of exposure along with the combined perceived support (negatively correlated) and perceived self-care demonstrated value in helping to better understand factors associated with the development of STS in foster parents. This provides a beginning foundation for the development of future research of STS in foster parents as well as helps to inform practice with this population.

The third question looked at specific variables demonstrating significance within the model and their relationship with STS outcomes. Personal trauma history ($\beta = -.303$, $t = -2.458$, $p < .05$) and perceived support ($\beta = -.338$, $t = -2.341$, $p < .05$) were both negatively correlated with STS in the research model. Perceived support together with personal trauma history in further regression analyses were found to explain 26% of the variance in foster parent STS in this model ($p < .001$) indicating that these two variables play an important role in helping to understand STS outcomes in this population. Analyses of specific survey questions provide additional insight related to these two predominant variables.

Significant Study Variables

Perceived support was negatively correlated with STS outcomes indicating that foster parents who feel they have the support they need in their role tend to have less risk for STS.

Twelve participants (24%) indicated that they "strongly agree' to "I feel that I have the support I need in my role as a foster parent of traumatized children." Of these 12 participants, none met qualifying criteria of PTSD according to the algorithm scoring method providing further validation of the strong relationship between support and lower STS outcomes. Nearly 40% of the foster parents in this study did not feel that they currently have the support they need in their role. It appears that adequate support for foster parents is a crucial aspect to address in the field of child welfare, particularly given the findings of the relationship between support and STS outcomes as well as number of foster parents in this study who do not currently feel adequately supported. While not all participants who feel unsupported display clinical levels of STS, it is apparent that this could put them at greater risk for negative STS outcomes.

Personal trauma history of foster parents appears to have an interesting impact on STS outcomes. While the majority of child welfare studies find personal trauma history to have a negative impact on severity of STS outcomes in child welfare professionals, the opposite was found in this study of foster parents. Approaching the foster parent role with a personal trauma history actually appears to serve as a buffer in the risk of developing STS. A significant negative correlation was found in the relationship between STS severity and a personal trauma history, indicating that foster parents with a trauma history display lower levels of STS outcomes than foster parents reporting no trauma history. The majority of foster parents with a trauma history report that their personal experiences have helped to prepare them for their role. Only one participant expressed a personal trauma history as negatively impacting the foster parent role. Understanding how difficult life experiences can buffer the impacts of STS can be beneficial for effectively working with and supporting foster parents, particularly given that 76% of the foster parents in this study reported having a personal trauma history.

Additional Study Variables

The research model for this study with the five variables demonstrated significance in understanding STS in foster parents (R^2_{adj} = .289, p < .05). Additionally, two variables, perceived support and personal trauma history, emerged as significant contributors to understanding of STS outcomes in foster parents. Some variables in the study model did not demonstrate significance in their relationship to STS outcomes.

Self-care. The relationship between self-care and STS outcomes demonstrated significance in the initial correlation matrix (r = -.383, p < .01) but in the context of the model it did not continue to emerge with significance. The relationship between taking good care of oneself and the severity of STS was not established when the other variables were included, indicating that perhaps self-care only plays a small role in STS outcomes, and this alone will not be enough to reduce the risk of STS in foster parents. Self-care may be important to overall health and wellness, but emphasizing self-care as a key component in managing the significant emotional impacts associated with caring for traumatized children may not be warranted. This finding is consistent with previous child welfare and helping professional studies of STS and self-care that also did not find a significant correlation (Bober & Regehr, 2006; Killian, 2008; Salloum et al., 2015). This is an important finding given the frequent emphasis on self-care in child welfare (Tullberg et al., 2012).

Experience. Additionally, though foster parent experience contributed to the overall research model, significance was not found in relationship between years of experience and STS outcomes. This is consistent with studies of child welfare professionals where no association was found between work experience and STS outcomes (Bride, Jones, & MacMaster, 2007; Cornille & Meyers, 1999; Nelson-Gardell & Harris, 2003). While the assumption could be made that

more seasoned foster parents can better handle the emotional stress associated with their role, this was not confirmed in this study. Foster parenting experience does contribute as one factor in the overall model, however, it appears that other variables may play a stronger role in STS outcomes than does the amount of experience one has in their foster parent role.

In this study, foster parents with several years of experience as well as foster parents just entering their role, appear to all potentially be at risk for the development of STS. Perhaps as Pearlin (1989) indicates in the stress process theory, the broader context within which an individual operates may have more to do with stress outcomes than does experience in this particular role. Experience can be very valuable in the foster parent role in many respects, however, it may not be able protect from the risk of STS. Alternatively, some research indicates that cumulative exposure can also have an impact on STS which could indicate that longer time in the foster parent role creates a greater risk for STS (Salloum et al., 2015). Those findings were not supported in this study of foster parents.

Exposure. In daily caring for a child who has experienced trauma, it appears that foster parents feel that they are frequently indirectly exposed to their foster child's trauma. Nearly half of the foster parents in the study indicated that they feel they are indirectly exposed to trauma on a daily basis. Yet, frequency of exposure was not significantly related to severity of STS in this study as has been observed in a number of studies of helping professionals (Baird & Kracen, 2006; Hensel et al., 2015). Exposure has been measured in various ways in the literature such as number of traumatized clients on one's caseload (Bride, Jones, & MacMaster, 2007; Hensel et al., 2015), amount of hours worked in direct contact with traumatized clients (Baird & Kracen, 2006), critical incidents (Regehr et al., 2004), type of work (Sprang et al., 2011), and frequency of exposure (Cornille & Meyers, 1999). In both a meta-analysis of STS and helping professionals

(Hensel et al., 2015) and a research synthesis of clinicians and STS (Baird & Kracen, 2006) it was indicated that there is a significant amount of evidence to indicate that amount of exposure in various forms does have a relationship to STS in helping professionals. In the aspect of exposure, the foster parenting role differs in some ways from that of child welfare professionals. While foster parents, as noted in this study, have the potential to be indirectly exposed daily to their foster child's trauma, their boundaries of exposure are limited to the child or children in their home thus the source of the daily indirect exposure as well as the specific event(s) are a constant. Additionally, not all foster parents in their caregiving role may be exposed to the specific details of the traumatic events of their foster children as a caseworker or therapist are likely to be in their specific roles.

Foster parents in this study reported indirect exposure to their foster children's trauma in several ways, primarily through written reports (n = 27, 54%), caseworkers (n = 31, 62%), foster child (n = 34, 68%), and court hearings (n = 35, 70%). However, the intensity of this exposure was not captured in the study to assess perceived severity of exposure to the child's traumatic material nor the level of detail that was experienced. The *DSM-5* (APA, 2013) is clear in indicating that "repeated or extreme exposure to aversive details" is needed for the PTSD indirect exposure criterion" (p. 271). It may also be of value to consider the additional indirect exposure criterion "learning that the traumatic event(s) occurred to a close family member or close friend" given the complexity of the foster parent role of serving in the capacity as a "parent" to the child (p. 271). Frequency combined with intensity of exposure will need further exploration to develop a clearer understanding of foster parents' unique kinds of exposure to trauma.

Emotional preparedness. Due to high correlation between two variables in the study, one variable in the research hypothesis model was eliminated. Emotional preparedness was highly correlated with support (r = .756). However, it is beneficial to review this variable for consideration in future studies. Foster parents were asked to rate the statement, "I feel prepared to manage the emotional stress of foster parenting traumatized children," on a Likert scale. Descriptive statistics of this variable indicate that the majority of foster parents (n = 36, 72%) feel emotionally prepared for their foster parent role in caring for traumatized children. Mean STSS scores of foster parents who feel prepared and indicated strongly agree or agree (M = 32.66, SD = 9.68) are lower than foster parents who do not feel emotionally prepared and indicated strongly disagree or disagree (M = 43.77, SD = 14.14). This variable was missing data for one participant. Based upon the descriptive analyses, it appears that the construct of emotional preparedness warrants further exploration, particularly given that over one-fourth of foster parents did not feel emotionally prepared for the role.

Measuring emotional preparedness will need further consideration to ensure that the meaning is more clearly captured given its close alignment to perceived support. Pearlin (1989) notes that coping buffers and social support buffers have similarities and that they often intersect. Perceived emotional preparedness was identified as a coping buffer and perceived support was identified as a social support buffer. Pearlin (1989) indicates that coping "refers to the actions that people take in their own behalf as they attempt to avoid or less the impact of life problems" (p. 250) and that coping attempts to "change the situation" or "manage the meaning" of situations to keep stressors manageable (p. 250). Social support addresses "the social resources on which one potentially may draw" and "the resources that one actually uses in dealing with life

problems" (Pearlin, 1989, p. 251). Both support and emotional preparedness have unique components that warrant further exploration in the foster parent population.

Kinship caregivers. Provided that inclusion criteria were met for licensure and primary caregiver status, kinship caregivers could also be included in this research study. Twenty percent of study participants (n = 10) identified as kinship caregivers. Three kinship caregivers also identified as foster parents of other children in addition to their kinship care children. Mean STSS scores of kinship caregivers (M = 35.30, n = 10) were consistent with mean STSS scores of non-kinship foster parents (M = 35.95, n = 40). Additionally, controlling for kinship caregivers in the regression analysis identified no significant differences in findings. These findings indicate that kinship caregivers are also at risk of the development of STS consistent with the findings in this study. Kinship caregivers are a valuable and very important resource in the child welfare system of care and could also benefit from support and resources to address STS impacts in their crucial role.

Limitations of the Study

This study acknowledges several limitations. First, while efforts were made to obtain a representative sampling of foster parents, the study sample is still limited to a relatively narrow group of foster parents in one state, from one regional area which could impact generalizability to other geographic locations. The study sample consisted of four of the five organizations in Kent County, Michigan that are contracted to provide children's foster care services by the State of Michigan. Both email and mail survey methods were utilized to ensure that all foster parents in the participating organizations meeting inclusion criteria were offered the opportunity to participate in the study. There was a response rate of 25% (n = 65) for this research study, however, only 50 respondents met the study's inclusion criteria representing 20% of the total

population surveyed. The sample offered little heterogeneity in regard to ethnicity, gender, and relationship status and may not be entirely representative of the larger foster parent population. Demographic data on foster parents at national and state levels do not appear to be regularly collected and analyzed (Grimm & Darwall, 2006; Kirby, 2015). Local Kent County foster parent demographic data also do not appear to be collected in a central database (J. Roley, personal communication, August 17, 2016). Kirby (2015), in a study of foster parent demographics collected in 1991, found that "foster parents were better educated, less affluent, and as racially diverse as the general population" but also found an over-representation of African American foster parents, noted to likely be a result of the over-representation of African American children in the foster care system as well (p. 139). Kirby (2015) also found the majority of foster parents to be Caucasian (78%) and married (79%). The demographics of this research study demonstrate a predominately Caucasian (94%) and married (88%) sample as well but do not represent the African American (4%) population similar to Kirby's (2015) demographic study. This small homogeneous study sample poses some challenges in the generalizability of the data to the larger foster parent population. Additionally, the limited response rate (20%) also can impact generalizability of findings. Those individuals who chose to participate in the survey may have had a greater interest or connection to the subject of STS than those who did not choose to participate. Additionally, one organization chose not to participate in the research study for unknown reasons. Though there are state licensing regulations for all foster parents and foster care organizations, this organization's training, support, and management of its foster care homes could be somewhat different from the other four and may have provided additional data in answering the research questions. However, given this new area of research exploration of STS

in foster parents, the results can provide a beginning step in developing direction for future larger scale analyses.

Second, despite careful selection of a standardized instrument, the STSS measure introduced some notable limitations. For example, the original STSS measure has been validated and subsequently utilized in a number of studies to assess STS in helping professionals, however, the measure has not previously been studied with foster parents (Bride, Robinson et al., 2004). To proactively address this limitation, the questions were reviewed by Dr. Bride and consent was provided to utilize the STSS in this study of foster parents (B. Bride, personal communication, October 9, 2013). The instrument does note that, "'client' is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, etc…" (Bride, Robinson et al., 2004, p. 13). However, even with these adjustments, the instrument items may not fully represent the foster parent "helping relationship" in comparison to occupational roles identified as helping professions.

To further address the STSS measure limitations in the application to foster parents, the original adapted STSS instrument was tested in a pilot study of refugee foster parents for a research internship in 2010-2011. While the pilot study provided a small sample (n = 35) of refugee foster parents (79 surveyed), the initial findings of this study, using the adapted STSS instrument, are similar to research studies of STS in social workers. According to the algorithm scoring approach, 9% of study participants met criteria for all three subscales (based upon the *DSM-IV-TR* (APA, 2000). The findings are relatively similar to Bride's (2007) study of social workers which found 15% of social workers to meet all 3 criteria according to the algorithm approach. Subscales of the pilot study found intrusion (66%), compared to Bride's study (45%),

avoidance (17%) compared to Bride's study (25%) and arousal (11%) compared to Bride's study (25%).

Since completion of the pilot study, the *DSM-5* (APA, 2013) was released containing revised criteria for PTSD, thus necessitating some additional revisions to the STSS instrument. Dr. Bride has provided a list of additions to the measure, however, these added questions have not yet been tested with foster parents nor do there appear to be published research studies of helping professionals utilizing the updated STSS instrument. The original STSS instrument has been noted to be frequently utilized in empirical studies of STSS and demonstrates strength in measuring STS due to its close alignment to PTSD diagnostic criteria (Elwood et al., 2011). In this study, utilizing a Cronbach's alpha statistic to test the adapted STSS for reliability, an alpha of .93 was obtained indicating high internal consistency of the overall measure in assessing the STS construct. Research studies utilizing the updated STSS would be beneficial in providing comparison analyses for this study's findings. Additionally, future research should be conducted to provide greater definition of the STS construct, particularly in relation to its alignment with current PTSD diagnostic criteria. The lack of research on the STS construct and its alignment with current *DSM-5* (APA, 2013) PTSD diagnostic criteria presents challenges in how results from the STSS can be interpreted.

Third, the survey instrument itself also posed some limitations in this study. A pilot study was conducted to test the survey, however, there were still limitations evidenced in the current study. Following findings from the pilot study of STS in refugee foster parents, new research questions were formulated which necessitated the inclusion of additional survey items. These survey items encompassed the stress buffer variables: perceived support, perceived emotional preparedness, and perceived self-care. These questions were not previously tested with foster

parents, however, the stress buffer variables were carefully identified through the stress process framework as well as a review of STS child welfare literature. Foster parent perception of these variables was of particular interest given the lack of research specific to this population as well as the alignment with stress process theory's emphasis on the value of perception in relation to stress outcomes (Pearlin, 1989). However, while foster parent perception is valuable to assess, there are some inherent limitations in relying solely on this measure. Memory of prior events may not be entirely accurate and perception versus actual behaviors may also differ.

Specific aspects of each of the stress buffer variables were not identified through this study. Utilizing some form of standardized measures for support, self-care, and preparedness could provide additional data and comparison analyses. The study findings indicate that support appears to be significantly correlated to STS outcomes, however, the study did not assess kinds or amount of support that would be beneficial. Future in-depth research on support and its relationship to STS in foster parents appear to be warranted and could offer more information on how to best support this population in their role. Social support instruments such as the Dunst Family Support Scale (FSS) could be utilized to measure support in several areas such as kinship, partner support, informal support, as well as organizational and professional supports and offer a deeper understanding of specific aspects of support related to STS (Dunst, Jenkins, & Trivette, 2007). Self-care instruments such as the Mindful Self-Care Scale (MSCS) which assesses six domains of self-care could be utilized in future studies to better assess specific aspects of self-care that impact the development of STS (Cook-Cottone & Guyker, 2016). The General Self-Efficacy Scale could also be utilized in future studies to better assess foster parent feelings of preparedness to cope with stressful events and daily struggles (Schwarzer, Mueller, & Greenglass, 1999). Other aspects of measurement such as placement stability, retention, or

reporting from other sources such as caseworkers could also be considered to supplement perception in future studies.

A fourth potential limitation of this research study was the limited qualitative data that was collected. Foster parents were provided with the opportunity to add comments at the end of the quantitative survey with the statement, "Please write any additional comments you have about the personal impacts of caring for a foster child in your home who has experienced trauma." Additionally, participants were able to add to a question about the ways in which they feel they are exposed to their foster child's trauma by checking "Other, please specify." These few questions provided some additional, but very limited qualitative information. After conducting foster parent trainings for several years, it is evident that many foster parents have been personally impacted in some way by their foster child's traumatic experiences and have crucial information to share. With the use of this quantitative measure, there may be valuable information that was not able to be quantified or uncovered. Foster parent voice is a very crucial aspect of the research that has been noted to be missing in much of the literature (Rehnquist, 2002). While this study provides some level of foster parent voice, additional qualitative studies could extend the literature to provide additional insights into the personal impacts of the foster parent experience related to STS. As evidenced in the study comments, foster parents desire to share their personal experiences and to be heard on the subject of STS. Several wrote about very specific experiences and how they were personally impacted by their foster child's trauma. There could be significant benefit in qualitative research studies of STS in foster parents. There appears to be particular value in focus group research based upon prior foster parent studies utilizing this method (MacGregor et al., 2006; Rosenwald & Bronstein, 2008).

Future qualitative studies could explore current and past life circumstances that contribute to stressors and their ultimate impacts on stress outcomes. Additional exploration could address motivation for fostering and its relationship to STS. Further exploration of personal trauma history in a qualitative study could provide greater understanding for the findings in this study of lower STS scores in foster parents with personal trauma history compared to higher scores in those with no trauma history, particularly given that this finding is contrary to many child welfare and helping professional studies on personal trauma history and STS. Exploring kinds and severity of previous trauma in relationship to STS could also be beneficial to determine if there are differences in STS outcomes dependent on type of personal trauma history. Some child welfare professional research studies have found varying differences in STS outcomes dependent on type of personal trauma history (Pryce et al., 2006). Self-care may also be an interesting area of study in qualitative study given its association with STS in this study but its limited significance in the overall model. Understanding how self-care impacts STS outcomes as well as how STS may impact self-care activities could help to inform future training and support services for foster parents.

This research study provides a beginning foundation for understanding STS in the foster parent population. This knowledge can help to inform MSU's School of Social Work foster parent training curriculum development as well as resources and support offered to this population through local child welfare organizations. Future research will be beneficial to provide a more in-depth analysis of specific variables associated with STS to strengthen our understanding of how to better support foster parents in their role of caring for traumatized children. Specific practice recommendations are limited by the lack of prior research on STS in the foster parent population to substantiate these findings. Application of the findings are also

limited by the small sample size, the homogeneity of the sample, as well as the limited scope of the study. However, some valuable information can be gleaned from this study that may be of present benefit to child welfare organizations.

Implications for Theory and Future Research

The theoretical underpinnings for the hypothesis of this research study are found in Pearlin's (1989) stress process theory. The stress process has three main components: the sources of stress, buffers of stress, and manifestations of stress (Pearlin, Lieberman et al., 1981). In alignment with stress process theory, the analytic model for this study identified "stressors" reported in STS literature to potentially be associated with STS outcomes as well as "stress buffers" that are found in the literature to potentially have an impact on STS outcomes and subsequently impact "stress outcomes" related to STS. Stress process theory emphasizes the importance of viewing stress in the context of the social environment rather than from an individual perspective in order to better understand these stress outcomes.

This theory proved to be very useful in designing the analytic model for the research study as well as in the analysis of the findings. Both stressors and stress buffers were identified in the model and stress outcomes were measured utilizing the STSS. The overall model, with the inclusion of three identified stressors and the added two identified stress buffers, demonstrated significance ($R^2 = .365$, $p < .01$) in explaining the variability in stress outcomes as measured by total STSS scores. The analysis of the research model consisting of stressors and stress buffers in relationship to stress outcomes helped to provide an initial starting point of understanding frequency and severity of STSS in the foster parent population as well as learning more about how particular stressors and stress buffers may impact their stress outcomes.

Stress process theory was particularly beneficial in the analysis of personal trauma history, which differed from outcomes in child welfare STS research. Pearlin's emphasis on perception of the stressors and value placed upon in relation to stress outcomes provides a background to assess the negative correlation between STSS scores and personal trauma history. The value placed upon current as well as past stressful life events, according to stress process theory, can have an impact on ultimate stress outcomes. Additional information gathered on foster parent perception of their personal trauma in relationship to their role as a foster parent uncovered the value they placed on prior personal traumatic experiences in helping them to prepare for their current role. This, Pearlin (1989) notes, can make a significant difference on the ultimate stress outcomes. Rather than viewing secondary traumatic stress outcomes in foster parents from an individual lens, stress process theory provides a framework for a more holistic perspective and as Pearlin (1989) states, to embrace "inseparability between the circumstances of social life and individual functioning" (p. 252).

Though STS research appears to have grown in popularity in the last 15 years with a variety of occupational roles, currently there do not appear to be any published research studies of STS and the foster parent population. This study provides a first step toward developing an understanding how foster parents may be impacted through caring for traumatized children. Though some valuable information can be ascertained from the results of this study, there is still much to be learned. Several areas of future research have been uncovered as a result of this study.

Foster parents' exposure to trauma appears to come in different forms and contexts than for helping professionals engaged in an occupational role with traumatized individuals. The ways in which exposure has been measured in helping professionals may not be applicable to foster

parents given that the boundaries of their roles are not as clearly defined in many respects. The perceived intensity of the exposure, in addition to frequency, amount, or types of exposure needs to be captured in order to more fully understand the association between exposure to indirect trauma and STS outcomes. Future research studies may benefit from assessing the PTSD indirect exposure criterion more specifically in relationship to the unique aspects of the foster parent role. Some foster parents may not be exposed to "aversive details" or have "repeated or extreme indirect exposure" (APA, 2013, p. 271). However, consideration might be given to the other indirect exposure criterion "learning that the traumatic event(s) occurred to a close family member or close friend" (APA, 2013, p. 271). There is the potential for this criterion to align more closely with the indirect exposure experiences of some foster parents in their caregiving role and thus would need a different kind of measurement. A qualitative study to hear foster parent voice on their indirect exposure experiences could provide valuable information and further direction on this subject.

The support variable was identified as a significant explanatory variable in the research model. Perceived support appears to be correlated with stress outcomes in that foster parents who feel more supported have lower STSS outcomes. Most foster parents feel supported in their role and clinical levels of STSS are not evidenced in the majority of the foster parents in this study. However, there are a percentage of foster parents in the study (38%, $n = 19$) that do not feel that they currently have the support they need in their foster parent role. Given our knowledge of the crucial need for foster parents as well as the challenges in retention of this population, this appears to be an important area of emphasis. The current study did not assess kinds of support that foster parents felt were lacking. The study focused only on perception of current need. Though, in the open ended comment question at the end of the survey, some participants did

comment on support needed such as optional counseling for the foster parents provided through the foster care organization and agency support and resources to better address the child's trauma impacts. Research on specific aspects of support that appear to be beneficial in buffering STS outcomes in foster parents could be beneficial.

While this study provided a beginning foundation for understanding the relationship between support and STS, additional qualitative research could contribute to a deeper understanding of how and what aspects of support may serve as buffers specific to the foster parent role and stress outcomes. Interviews of foster parents with moderate to severe STS and low support may help to identify kinds of support needed as well as personal and social resources that may contribute toward buffering the impacts. Additionally, interviewing foster parents who have high STS and high perceived support as well as those with low STS and high support can also be beneficial in comparing the personal and social resources between the groups. Further research with a more complex theoretical model would be beneficial as well to develop a deeper understanding of factors associated with the development of STS in foster families. The Resiliency Model of Family Stress, Adjustment, and Adaptation or the Double ABCX Model of Family Adjustment and Adaptation could provide a framework to offer insights on additional variables associated with family stress and coping (McCubbin & McCubbin, 1991).

While the inclusion criteria for this study required that participants be a licensed foster parent with a foster child currently in the home as well as identify as the primary caregiver for the child, future research may benefit from the study of others that did not meet these specifications. A total of fifteen survey respondents were excluded from the data analysis. Nine respondents did not meet initial inclusion criteria. An additional six survey respondents started but did not finish completing the online survey and were missing key STSS data. Four of the

respondents that did not meet inclusion criteria indicated that they are currently adoptive parents. One of these adoptive parent respondents met STSS cutoff criteria. Similar to foster parents, adoptive parents may also be an important population in the study of STS. Six respondents that were excluded from the study indicated that they did not currently have a foster child in the home and thus did not meet inclusion criteria. Two of the six met the cutoff STSS score as well as met all four PTSD symptom criteria indicating the potential of a PTSD diagnosis. Both indicate that they are not licensed foster parents with one identifying as a former foster parent and one as a current adoptive parent. Foster parents who have left their role may be an important population to study to determine if there are linkages between retention and STS. Bride, Jones, and MacMaster (2007) identified a significant negative correlation between STS and intention to leave the field. This could be a valuable area of study in the foster parent population, both in current and former foster parents.

Primary caregivers were targeted for this study and only 16% of participants were male. Mean STSS scores for male primary caregivers was 32.63 (n = 8, SD = 9.20) in comparison to 36.43 for female primary caregivers (n = 42, SD = 12.37). Future research specific to male caregivers that were underrepresented in this study could provide additional information on how they impacted by indirect exposure to their foster child's trauma. Additional research on other underrepresented foster parents in this study would also be beneficial. Ninety-four percent of participants identified as Caucasian demonstrating very limited diversity in the sample. Additionally, the great majority (88%) were married. Future studies specific to underrepresented groups could also be beneficial to understand their unique needs. A qualitative design may prove beneficial in accessing a more diverse sample of foster parents.

The *DSM-5* (APA, 2013) is still in its infancy. Recent STS studies are very limited with the inclusion of the changes to the exposure and symptom criteria of the PTSD diagnosis. Given the added indirect exposure criterion, the linkage between STS and PTSD has gained attention with some indicating that STS may no longer exist in that it can be identified now as PTSD while others are much more hesitant to link the two as one (Horesh, 2015). Some believe that a clear definition of STS has not been established and thus the entry gate for STS has not been clearly distinguished, and as such, may not align with the more specific indirect exposure identified in the *DSM-5* (Hensel et al., 2015). These broader issues related to PTSD and the STS construct need additional study and clarification to more effectively engage in STS research. These questions impact study hypotheses, measures utilized, as well as analyses of outcomes.

Implications for Practice

The findings of this study help to shed some light on secondary traumatic stress and the foster parenting experience and can be of interest to the child welfare organizations as they seek to understand and support foster parents in their challenging role. This study appears to be the first of its kind and future research studies will be needed to determine whether these findings are replicated through additional research.

First, there is evidence to indicate that a small portion of foster parents are experiencing moderate to severe levels of STS similar to the prevalence rates of STS in helping professionals working with traumatized clients. Indeed, 12% of the foster parents in this study sample reported experiencing symptoms consistent with PTSD diagnosis. While it is encouraging to find that the majority of foster parents are not significantly distressed by the indirect exposure of their foster child's trauma, there are a small group of foster parents that present with clinically significant levels of traumatic stress. The impact that level of distress has on their personal and professional

lives, their families, as well as their role as a foster parent are not clear from the scope of this study. However, in understanding the far reaching impacts of PTSD, it can be surmised that there are some challenges they are likely facing in their day to day functioning. Foster parents expressed some of these challenges in the qualitative comments section. One foster parent reported having to quit working outside the home due to the emotional distress as well as the strain it placed on the marital relationship. Another noted not being able to look forward to and celebrate birthdays and holidays. One reported on the emotional hardship it has created on the family as a whole. Others simply stated, "It is very difficult" and "It is exhausting." The evident prevalence of STS in a small, but noteworthy, portion of foster parents can provide child welfare organizations with an awareness of the potential emotional impacts of indirect exposure on foster parents. This knowledge and awareness can help child welfare professionals to both assess as well as offer support and resources related not only to caring for the foster child, but also to caring for themselves as they engage in this role.

Within the limitations of this study, specific aspects of support that foster parents feel they need cannot be ascertained. However, it is evident that foster parents who feel they do not have the support they need, are at greater risk for STS. The findings from this study indicate that nearly 40% of foster parents feel that they do not have the support they need in their current role. This appears to put a significant number of foster parents at a greater risk for experiencing STS. While this does not necessarily indicate that child welfare organizations need to provide more or different kinds of support to foster parents, it does indicate that support should be an area of emphasis in engaging with foster parents. In fact, some studies of child welfare professionals found that peer support actually mattered more than organizational support in buffering the impacts of STS (Bride, Jones, & MacMaster, 2007; Caringi & Hardiman, 2012).

Personal trauma history has been equated to experiencing a higher risk for STS in child welfare positions (Baird & Kracen, 2006; Hensel et al., 2015), however, this does not appear to be the case with foster parents in their unique role in the child welfare system. Findings of this study regarding the relationship between personal trauma history and lower levels of STS as well as foster parents' perception of how their own trauma positively impacts their role, can be encouraging to child welfare organizations. Understanding the unique assets and capacities that foster parents bring to the table can be beneficial in empowering them in their role of caring for traumatized children. This new knowledge can also help the child welfare field to perhaps ascribe a different "value" to personal trauma history than has been attributed in the past and reshape foster parent curriculum on STS.

Findings from this study provide some additional implications for foster parent training. Given that foster parents who have not had a personal trauma history were noted to have higher STS tendencies in the study, training efforts may need to also emphasize emotional preparedness for the exposure to traumatic material associated with caring for foster children. Though the exposure to traumatic material is also difficult for child welfare professionals, they are perhaps more likely to receive training and formal education to help prepare them for this aspect of the work than foster parents currently receive. Additional, the findings of this study indicated that experience was not highly correlated to STS outcomes, suggesting that foster parents at all levels of role experience are susceptible to STS. This provides support for not only providing STS content in preservice training, but also throughout ongoing foster parent educational activities. It also provides useful information for child welfare professionals as they engage with foster parents at all levels of experience so that assumptions are not made based upon longevity in the foster parent role. Foster parents have been noted in prior research to feel isolated in their role

and not have connections with others that understand their challenges (MacGregor, Rodger, Cummings, and Leschied (2006). Given the key role that support plays in this research study, it may also be beneficial to consider foster parent training activities which help them to identify and access the personal and social supports they need in their unique role.

Implications for Policy

Results from this study may be beneficial to the field of child welfare in viewing the challenges and needs of foster parents from a holistic perspective. For example, emphasizing self-care alone as a means of buffering STS does not appear to be beneficial, nor does reducing exposure, or having prior experience. However, collectively addressing support, self-care, exposure, and experience (both personal life experience and role experience) does appear to provide a greater potential for understanding STS outcomes in foster parents. Rethinking how foster parents are trained and supported from this holistic perspective could have an effect on retention as well as stability of foster care placements. This holistic perspective provides implications for policy as well.

Detailed information on the foster parent population does not appear to be regularly collected and analyzed. Developing a greater knowledge of those who step forward to take on this role is an important step in offering training and support which best meets their needs in the context of their role. Without a clear understanding of the population being served, only a cookie cutter, one size fits all approach to foster parent training is likely to be offered. While there are some key components that have been identified as important to be included in foster parent trainings (CWLA, 2013), it appears that there continues to be a need to develop a greater understanding of the foster parents who are provided with these trainings in order to tailor additional content more specifically to meet their personal needs. For example, based upon the

findings of this study, 76% of foster parents reported having experienced a personal traumatic event which significantly impacted them which much higher than evidenced in the general population (NCPTSD, 2012). Of those foster parents reporting a personal trauma history, 70% felt that their personal trauma history helped to prepare them for their foster parent role. It would be beneficial to identify if the majority of foster parents in trainings have their own personal trauma histories and how this may potentially impact their role so that training content can be more effectively tailored to the unique challenges of their roles. Consistently collecting and analyzing basic demographic and role characteristic information on foster parents to inform practice would be an important area of child welfare policy to consider.

An additional area of policy consideration could also be in foster parent training curriculum content. Given the prevalence rates of STS observed in this study as well as previous research on the personal impacts associated with the foster parenting role, it appears evident that training content needs to also address these very personal role challenges. Some training content has begun to emerge to address STS in the foster parent population. With further research on this subject, STS training content can be tailored more specifically to foster parents and policy considerations can be made about the inclusion of this content in required foster parent trainings. The inclusion of content on STS and foster parents in child welfare professional trainings could also be considered.

Foster parenting has been noted by some to be one of the most crucial aspects of a healthy and successful child welfare system (Harden, 2004; Hussey & Gou, 2005; Rubin et al., 2007). Developing a deeper understanding of the personal challenges they experience in this role can help child welfare organizations to identify and secure needed resources and support so that foster parents can more effectively engage in their role. This understanding can also be valuable

in policy development at the organizational and state level for recruiting, training, and retaining foster parents. This study provides a small step toward increasing this understanding, however, much more continues to be needed.

Implications for Social Work Education

Initiatives to include trauma knowledge content in social work education curriculums has begun to take hold in recent years. The Council on Social Work Education in 2012, released standards for social work practice in trauma to help guide schools of social work in the development and implementation of trauma curriculum content. The NCTSN (2013) has developed trauma curriculum content specific for child welfare professionals as well. However, Strand, Abramovitz, Layne, Robinson, and Way (2014) note that "although some attention has been devoted to incorporating both knowledge about trauma and secondary traumatic stress, there is not the focus in social work education that one might expect given the prevalence of trauma exposure in clients served by social workers" (p. 121). STS curriculum content in social work education is thought to be personally beneficial for social workers as they engage in emotionally challenging work (Strand et al., 2014). However, developing stronger secondary trauma content in social work education programs may have an added benefit of providing social workers who enter into child welfare positions with a good foundational understanding of STS to better support foster parents in their challenging role as well.

Conclusion

Those who step up to the plate and open their homes and hearts to care for abused and neglected children are a valuable asset to our child welfare system. The role of a foster parent is both rewarding as well as at the same time, very challenging. Recruiting, supporting, and retaining foster parents is a crucial aspect of a healthy child welfare system given the linkages

between child outcomes and foster placement stability. Developing an understanding of the emotional impacts of caring for traumatized children is a crucial step toward providing the support and resources to sustain foster parents in their caregiving role. STS has been identified in a variety of occupational roles that engage with traumatized populations and this study provides evidence that foster parents, in caring for traumatized children, are not immune to STS impacts. It is this researcher's hope that these findings will provide valuable contributions in supporting foster parents in their role and that future research will be directed toward the study of the emotional challenges faced by this population in their crucial role within the child welfare system.

APPENDICES

APPENDIX A:

Analytic Model

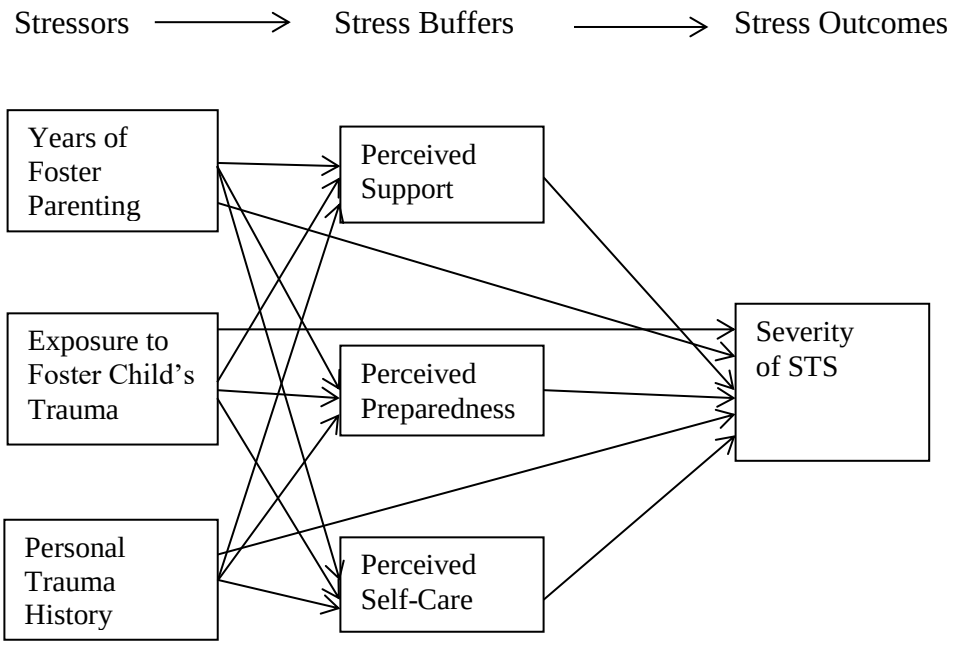

Figure 1 Analytic Model

APPENDIX B:

Project Consent Form and Survey

Foster Parent Survey

Research Participant Information and Consent Form

You are being asked to participate in a research study. Researchers are required to inform you about the study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision about whether you would like to participate or not. You should feel free to ask the researchers any questions you may have.

Study Title: Secondary Traumatic Stress and the Foster Parent Experience: Exploring Factors Associated with the Prevalence of Secondary Traumatic Stress in Foster Parents Caring for Children Who Have Experienced Trauma

Researcher and Title: John Mooradian, Ph.D., Associate Director of the School of Social Work, Associate Professor
Department and Institution: Social Work, Michigan State University
Address and Contact Information: 202 Baker Hall, MSU, East Lansing, MI, 517-353-9745

1. PURPOSE OF RESEARCH:

You are being asked to participate in a research study of secondary traumatic stress in foster parents. This study is being conducted by John Mooradian, Ph.D. and Nola Carew, LMSW to increase our understanding of effects children's past traumatic experiences have on foster parents who are currently caring for them. Results from this research study will be used to help inform our understanding of foster parent needs and help improve supports to foster parents as well as to inform future research studies.

You have been selected as a possible participant in this study because you are a licensed foster parent with one or more foster children currently placed in your home and you have identified as the parent who assumes primary responsibility of caring for the child in the home.

The researchers provided this survey link to your licensing agency to be emailed to licensed foster parents in their domestic foster care program with a foster child currently in their home. The researchers do not know your name, and your licensing agency will not know whether you submit a completed survey to the researchers.

If you decide to participate in this research study, it will take you about 30 minutes to complete the survey. You must be at least 21 years old to participate in this research study.

2. WHAT YOU WILL DO:

You are being asked to complete a confidential survey which will ask you questions related to your role and experiences as a foster care provider. The answers from completed submitted surveys will be compiled and analyzed by the researchers to develop a better understanding of the impacts

1

traumatic experiences of foster children have on their foster parents.

3. POTENTIAL BENEFITS:

You will not directly benefit from your participation in this study. However, your participation in this study may contribute to a better understanding of the impacts of foster children's traumatic experiences on their foster parents and how to better support foster parents in their caregiver role.

4. POTENTIAL RISKS:

The potential risks of participating in this study are that you may experience some feelings of discomfort or distress when asked to reflect on your foster child's or your own difficult life experiences. After completing this survey, if you feel that you are in need of support to process your feelings or reactions you can contact: Kent County Community Mental Health Services – Network 180 at 616-336-3909 or 1-800-749-2020 to obtain a mental health assessment or you can also contact your foster care organization for a referral for mental health services.

5. PRIVACY AND CONFIDENTIALITY:

The data for this project are being collected confidentially. You will be asked to submit a survey to the principal investigator, John Mooradian, Ph.D. by accessing the survey monkey link below and completing and submitting an anonymous online survey. The answers from your survey will be entered into a password-protected secure computer located at Michigan State University, 202 Baker Hall, East Lansing, MI without any identifying information connected to your answers. Project data will be stored at this location for a minimum of 3 years after the completion of this study. The researcher, John Mooradian, Ph.D. and research assistant, Nola Carew, LMSW will have access to the collected data. Michigan State University's Institutional Review Board will also have access to the data and the research findings. Your foster care agency will not have access to individual data, but will be provided with the overall findings of the research study. The results of this study may be published or presented at professional meetings but the identities of all research participants will remain anonymous. Your confidentiality will be protected to the maximum extent allowable by law. Following completion of the online survey, participants will be offered an opportunity to participate in a gift card drawing for one of two $50 Amazon gift cards. Participant information collected for the gift card drawing will not be able to be linked to completed survey data.

6. YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW:

Participation in this research project is completely voluntary. You have the right to not participate in this study and not complete the online survey. You may change your mind at any time and withdraw from the study by choosing to not finish completion of the online survey. Choosing not to participate or withdrawing from this study will not change any services you may receive through your foster care organization or the benefits to which you are otherwise entitled.

Whether you choose to participate or not will have no affect on your status or role as a foster parent. Your foster care organization will not be informed of whether you do or do not participate in this study.

7. COSTS AND COMPENSATION FOR BEING IN THE STUDY:

There are no costs to you to participate in this research study.
If you would like to be entered into a drawing for one of two $50 Amazon gift cards, you may fill out the gift card drawing entry form with your name and contact information following completion of the online survey. When the researchers receive your completed survey and gift card drawing entry form, we will enter your name into the drawing for one of two $50 Amazon gift cards. Your gift card drawing entry form will be immediately separated from your survey and will be destroyed as soon as the gift card drawing is complete so that your survey answers will remain confidential to the fullest extent of the law. The gift card drawing will occur within one month following data collection

completion.

8. CONFLICT OF INTEREST:

The primary purpose of this study is for educational research. The research assistant, Nola Carew, LMSW, is a Ph.D. student at Michigan State University completing her dissertation research with the researcher, John Mooradian, Ph.D. The research assistant is a contractual trainer for local child welfare organizations providing trainings for employees, community members, and foster and adoptive parents and may have provided training to foster parents participating in this study. The research assistant has no role in the management, casework, or licensing of foster parents.

9. CONTACT INFORMATION FOR QUESTIONS AND CONCERNS:

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the researcher John Mooradian, Ph.D., @ mooradi1@msu.edu, 202 Baker Hall, MSU, East Lansing, MI 48824, 517-353-9745.

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at Olds Hall 408 W. Circle Dr. Rm 207 East Lansing, MI 48824

10. DOCUMENTATION OF INFORMED CONSENT:

Your completion and return of the enclosed survey indicates your voluntary consent to participate in the research study.

Please keep this form for your records should you have any questions or need contact information.

Please click next and continue forward if you would like to participate in this research study.

Foster Parent Survey

Questions about you

Thank you for agreeing to participate in our study. This study is about the impacts experienced by foster parents in caring for children and youth who have had traumatic experiences. We plan to use these results to gain a better understanding of the struggles and needs of foster parents. We want you know that some questions are about very personal experiences. We are committed to protecting your privacy. Your answers are confidential and no one will be able to match your survey with your name. For research purposes, please fill out this online survey separately from anyone else co-parenting with you in your home. You have indicated your consent to participate in this research study by completing and submitting the survey. We appreciate your willingness to participate and share your personal experiences in your role as a foster parent.

* 1. Please do not write your name on this form or anywhere on this survey. In place of your name, please help us to create your special personal identifier code in order to ensure that your survey is anonymous.To create the special personal identifier, please answer the 4 questions below and fill in the eight spaces. If a question is not applicable, write NA to fill in the spaces.

What are the first 2 letters of your mother's (or female guardian's) first name? For example Susan= SU

What are the last 2 numbers of the year you graduated high school or finished your GED? For example: May 1, 1988 = 88. Did not graduate = NA

How many brothers and sisters do you have? If fewer than 10, use 0 as the first number. For example 6 siblings = 06

what is the day part of your birthdate? For example: January 1, 1970 = 01

Now that you have created your special personal identifier, we will begin by asking some demographic questions about you.

* 2. What is your current age?

* 3. What is your gender?

- Female
- Male

4. In what type of community do you live?

- City or urban community
- Suburban community
- Rural community
- Other (please specify)

5. Which of the following best describes your current relationship status?

- Married
- Widowed
- Divorced
- Separated
- In a domestic partnership or civil union
- Single, but cohabiting with a significant other
- Single, never married

6. Which race/ethnicity best describes you? (Please choose only one.)

- American Indian or Alaskan Native
- Asian / Pacific Islander
- Black or African American
- Hispanic American
- White / Caucasian
- Multiple ethnicity / Other (please specify)

7. How many hours per week are you employed outside the home (in addition to your role as a foster parent)?

- 0
- 1-10
- 11-20
- 21-30
- 31-40
- 40+

8. What is the total annual income of the HOUSEHOLD in which you live?

- $0 to $29,999 USD
- $30,000 to $59,999 USD
- $60,000 to $89,999 USD
- $90,000 to $119,999 USD
- $120,000 to $149,999 USD
- $150,000 to $179,999 USD
- $180,000 or more USD
- Prefer not to answer

Foster Parent Survey

2. Questions about your role as a foster parent

* 9. Are you a licensed foster parent who currently has a foster child placed with you?

- ◯ Yes
- ◯ No

* 10. Are you the primary foster parent for at least one foster child currently in your home? (Primary means that you take on the majority of the role of providing care for the foster child in the home).

- ◯ Yes
- ◯ No

* 11. Please list the number of children in each category that are under the age of 18 and currently living with you.

	0	1	2	3	4	5+
Number of foster children under the age of 18 currently in my home	◯	◯	◯	◯	◯	◯
Number of kinship care children (children of extended family or close friends) under the age of 18 currently in my home	◯	◯	◯	◯	◯	◯
Number of biological children under the age of 18 currently in my home	◯	◯	◯	◯	◯	◯
Number of step children under the age of 18 currently in my home	◯	◯	◯	◯	◯	◯
Number of adopted children under the age of 18 currently in my home	◯	◯	◯	◯	◯	◯
Number of other children under the age of 18 currently in my home that are not already listed	◯	◯	◯	◯	◯	◯

* 12. How many years have you been a foster parent?

- ○ 0-1 years
- ○ 2-3 years
- ○ 4-5 years
- ○ 6-7 years
- ○ 8-9 years
- ○ 10 or more years

* 13. About how many foster children have you cared for in your home since becoming a foster parent?

[ ]

* 14. What ages of foster children have you cared for in your home? (Please check all that apply)

- ☐ Young children (Ages 0-5 years)
- ☐ School age children (Ages 6-12 years)
- ☐ Teenagers and youth (Ages 13-21 years)

* 15. What ages of foster children do you currently care for in your home? (Please check all that apply)

- ☐ Young children (Ages 0-5 years)
- ☐ School age children (Ages 6-12 years)
- ☐ Teenagers and youth (Ages 13-21 years)

* 16. Before you became a foster parent, did you have any other full time experience in parenting children?

- ○ Yes
- ○ No

* 17. Of all the foster children you have cared for in your home, what is the longest amount of time any of those foster children has lived with you?

- ○ Less than 1 year
- ○ 1 year
- ○ 2 years
- ○ 3 years
- ○ 4 years
- ○ 5 or more years

* 18. Of all the foster children you have cared for in your home, what is the shortest amount of time any of those foster children has lived with you?

- Less than 6 months
- 1 year
- 2 years
- 3 years
- 4 years
- 5 or more years

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Foster Parent Survey

3. Questions about your experience as a foster parent

According the the National Institute of Mental Health, Traumatic events are experiences which can cause physical, emotional, or psychological distress or harm. It is an event which is actually or felt to be a threat to one's safety and stability. It is often described as an event that is outside the normal range of daily human experience and often can make one feel helplessness or intense fear. Examples of traumatic events experienced by children in foster care can include events such as physical abuse, emotional abuse, sexual abuse, physical or emotional neglect, natural disasters, terrorism, loss of a caregiver, life threatening injury or illness, living with a caregiver with mental illness or substance abuse, or witnessing domestic violence in the home.

* 19. Have any of the foster children that are currently living in your home experienced a traumatic event at some point in their lives?

- ◯ Yes
- ◯ No

* 20. Have any of the previous foster children that you have cared for in your home experienced a traumatic event prior to living with you?

- ◯ Yes
- ◯ No
- ◯ n/a I have not had any previous foster children in my home

* 21. There are several ways in which we can be exposed to trauma. We can directly experience a traumatic event, witness a traumatic event, learn about a traumatic event that occurred to someone we care about, or we can hear about or be exposed to the details of someone else's traumatic event such as through their thoughts, feelings, and behaviors. In your role as a foster parent, are you ever exposed to the traumatic experiences of your foster children?

- ◯ Yes
- ◯ No
- ◯ n/a (my foster children did not experience any traumatic events)

* 22. Through which of the following sources have you been exposed to the traumatic experiences of your foster children? (please check all that apply).

- [ ] Written reports
- [ ] Caseworkers
- [ ] My foster child
- [ ] Court Hearings
- [ ] Foster Child's counselor
- [ ] None
- [ ] My foster child has not experienced a traumatic event
- [ ] Other (please specify)

* 23. Children who have experienced traumatic events sometimes display the impacts of these events in a variety of ways such as in their behaviors, thoughts and emotions. They might also display ongoing physical impacts as a result of their traumatic experiences. How frequently do you feel that you are exposed to these kinds of traumatic impacts in your interactions with your foster children?

- ○ Never
- ○ Once a year
- ○ A few times a year
- ○ Once a month
- ○ Once a week
- ○ Daily

Foster Parent Survey

Impacts of Foster Parenting

* 24. The following is a list of statements made by persons who have been impacted by their interactions with traumatized individuals. Read each statement and then indicate how frequently the statement was true for you in the past seven (7) days by checking the box next to each statement.

	Never	Rarely	Occasionally	Often	Very Often
I felt emotionally numb	○	○	○	○	○
My heart started pounding when I thought about caring for my foster child	○	○	○	○	○
It seemed as if I was reliving the trauma(s) experienced by my foster child	○	○	○	○	○
I had trouble sleeping	○	○	○	○	○
I felt discouraged about the future	○	○	○	○	○
Reminders of my foster child's experiences upset me	○	○	○	○	○
I had little interest in being around others	○	○	○	○	○
I felt jumpy	○	○	○	○	○
I was less active than usual	○	○	○	○	○
I thought about caring for my foster child more than I intended to	○	○	○	○	○
I had trouble concentrating	○	○	○	○	○
I avoided people, places, or things that reminded me of caring for my foster child	○	○	○	○	○
I had disturbing dreams about my experiences with my foster child	○	○	○	○	○

	Never	Rarely	Occasionally	Often	Very Often
I wanted to avoid spending time with my foster child	○	○	○	○	○
I was easily annoyed	○	○	○	○	○
I expected something bad to happen	○	○	○	○	○
I noticed gaps in memory about my interactions with my foster child	○	○	○	○	○
I experienced intense negative emotions	○	○	○	○	○
I engaged in reckless or self-destructive behavior	○	○	○	○	○
I unrealistically blamed others for the cause or consequences of the traumas experienced by my foster child	○	○	○	○	○
I had negative expectations about myself, others, or the world	○	○	○	○	○

Foster Parent Survey

Questions about your own personal experiences

* 25. The following is a list of statements about personal feelings and experiences related to foster parenting. Please check the box next to each statement that most accurately reflects your feelings and experiences.

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A (Not Applicable)
In my own life, I have experienced or witnessed a traumatic event that significantly impacted me	○	○	○	○	○
I am reminded of my own trauma history when I hear or think about my foster child's traumatic experiences	○	○	○	○	○
I feel distressed when I am reminded of my own trauma history	○	○	○	○	○
My personal traumatic life experiences have helped prepare me for my role as a foster parent	○	○	○	○	○
My personal traumatic life experiences have negatively impacted my role as a foster parent	○	○	○	○	○
I wanted to become a foster parent because of my own difficult life experiences	○	○	○	○	○
I feel prepared to manage the emotional stress of foster parenting traumatized children	○	○	○	○	○
I feel that I have the support I need in my role as a foster parent of traumatized children	○	○	○	○	○
I take good care of myself	○	○	○	○	○

26. Please write any additional comments you have about the personal impacts of caring for a foster child in your home who has experienced trauma.

17

APPENDIX C:

MSU Human Subjects Review Approval Letter

MICHIGAN STATE UNIVERSITY

Initial IRB Application Determination *Exempt*

June 14, 2016

To: John Mooradian
655 Auditorium Rd.
Room 202

Re: **IRB# X16-710e** Category: Exempt 2
Approval Date: June 14, 2016

Title: Secondary Traumatic Stress and the Foster Parenting Experience: Exploring Factors Associated with the Prevalence of Secondary Traumatic Stress in Foster Parents Caring for Children Who Have Experienced Trauma

The Institutional Review Board has completed their review of your project. I am pleased to advise you that **your project has been deemed as exempt** in accordance with federal regulations.

The IRB has found that your research project meets the criteria for exempt status and the criteria for the protection of human subjects in exempt research. **Under our exempt policy the Principal Investigator assumes the responsibilities for the protection of human subjects** in this project as outlined in the assurance letter and exempt educational material. The IRB office has received your signed assurance for exempt research. A copy of this signed agreement is appended for your information and records.

Renewals: Exempt protocols do not need to be renewed. If the project is completed, please submit an ***Application for Permanent Closure***.

Revisions: Exempt protocols do not require revisions. However, if changes are made to a protocol that may no longer meet the exempt criteria, a new initial application will be required.

Problems: If issues should arise during the conduct of the research, such as unanticipated problems, adverse events, or any problem that may increase the risk to the human subjects and change the category of review, notify the IRB office promptly. Any complaints from participants regarding the risk and benefits of the project must be reported to the IRB.

Follow-up: If your exempt project is not completed and closed after three years, the IRB office will contact you regarding the status of the project and to verify that no changes have occurred that may affect exempt status.

Please use the IRB number listed above on any forms submitted which relate to this project, or on any correspondence with the IRB office.

Good luck in your research. If we can be of further assistance, please contact us at 517-355-2180 or via email at IRB@msu.edu. Thank you for your cooperation.

Sincerely,

Harry McGee, MPH
SIRB Chair

c: Nola Carew

Office of Regulatory Affairs
Human Research Protection Programs

Biomedical & Health Institutional Review Board (BIRB)

Community Research Institutional Review Board (CRIRB)

Social Science Behavioral/Education Institutional Review Board (SIRB)

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