THE INTERSECTION OF THE SIBLING RELATIONSHIP, PARENTAL DIVORCE, AND MENTAL HEALTH SYMPTOMS

by

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ABSTRACT

Although sibling relationships and parental divorce are two popular areas of study, few research studies have focused on their relationship. In this quantitative study, the researcher explored the relationship between sibling relationship quality and parental divorce conflict, as well as the relationship between perceived sibling relationship quality during parental divorce and mental health in adulthood. The participant sample included 64 adults who experienced parental divorce in childhood with at least one sibling. Participants were required to complete a demographics questionnaire, the Post-Divorce Parental Conflict Scale (PPCS), the Lifespan Sibling Relationship Scale (LSRS), and the General Health Questionnaire (GHQ-12). A Pearson's r statistical test indicated that there was not a statistically significant relationship between post-divorce parental conflict and a high perceived sibling relationship quality, $r(64) = .208$, $p=.099$ (two- tailed). Similarly, another Pearson's r test indicated that there was not a statistically significant relationship between sibling relationship quality as indicated by the LSRS and overall mental health symptoms as indicated by the GHQ-12, $r(64) = -.264$, $p=.035$ (two-tailed). While the original hypotheses were unsupported by statistics, a visual interpretation of the data suggests some themes that may be worth further exploration. The results of this study add to the current literature in siblings and divorce research as well as suggests a need for further study and evaluation of an understudied group of individuals.

Keywords: sibling relationship, parental divorce conflict, mental health

Dedication

This dissertation manuscript is dedicated to my younger self. I have always loved the saying “be who you needed when you were younger”. I strive to be that person every day.

To young Taylor,

Keep going. Keep fighting to be that loving, empathetic, strong-willed individual. You will face many challenges as you grow up to become the woman you are today. Keep your eyes ahead, but don’t forget to appreciate all those that have come before to help guide you on your journey. Bask in the beauty of the life God gave you and appreciate all of the small joys! Keep shining your bright light and keep achieving those big dreams. Never forget to “get up, dress up, show up, and never give up”.

With love and so much pride,

the future Dr. Bufton

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To my family. Thank you for your unwavering support and encouragement. Thank you for the long talks about choices and setting goals. Here's to the "next ups". I owe all of my wisdom to you and your guidance and love.

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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

One of the most common Adverse Childhood Experiences (ACEs) is parental divorce or separation. Previous statistics claim that half of all marriages end in divorce (Miller, 2017); however, more recent statistics suggest the divorce rate has declined since this original statistic (Miller, 2017). Nevertheless, many children of divorce experience a disadvantage as the impact of parental divorce can lead to impairment in the emotional, social, and academic functioning of children during the time of the divorce, as well as long-term implications as the children mature into adulthood.

Protective or mitigating factors of ACEs include strong social and interpersonal support. This could consist of strong social bonds at school, in extracurricular activities, or within the home. Typically, parents whose marriages end in divorce, have more than one child. The sibling relationship is a compensatory relationship (Dijk et al., 2021) in which two individuals have many shared experiences, and in the case of parental divorce, share the impact of the familial separation. It is believed that a close sibling relationship can mitigate the effects of parental divorce and the high level of post-divorce parental conflict that may accompany it. Further research will need to examine the relationship between perceived sibling relationship quality and the presence of parental conflict, as measured by post-divorce parental conflict. Additionally, further research will need to explore the relationship between the sibling relationship during parental divorce and mental health symptoms in adulthood. This study provides additional data on how the sibling relationship is impacted amidst a parental divorce and how this relationship impacts present mental health symptoms.

Background

Popular research focuses on childhood development, particularly research on intrusive factors that impact social, cognitive, or physical development. Most common is research on adverse childhood experiences (ACEs), which includes parental divorce and separation, and the impact of social supports during this time, specifically social supports within or close to the home. Before diving into the research specific to these relationships, it is also important to consider trends in divorce research.

Divorce Statistics

Common trends in family research focus on the prevalence of divorce. Previous statistics suggest that about 50% of marriages end in divorce (Miller, 2017), while more recent statistics suggest that the divorce rate is not as prevalent (Miller, 2017). Shifts in values or norms from one generation to the next appear to be responsible for the decrease in the divorce rate, as many are choosing to get married later or at an older age than in previous generations (Cohen, 2019). Some researchers also suggest that the divorce rate is declining as a result of economic shifts (Leopold, 2019). Leopold (2019) notes that women may experience a shift in household income as a result of divorce, which may impact the need to stay in the marriage for financial stability (Leopold, 2019).

Previous research struggles to agree on influences that justify the rise or fall in the divorce rate, however, most agree on the significant impact divorce can have on the well-being of the family, most notably the children involved. The stresses and tensions related to the separation and divorce process impact the availability of parents for their children (Jackson & Fife, 2018). Additionally, adverse events, including divorce, poverty, or

mental illness, can present a risk for children's mental and physical well-being during crucial developmental years (Demir-Degadas et al., 2018).

Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) refer to the potentially traumatic and negatively influential events during a child's life, including abuse or dysfunction within the home setting (Felitti et al., 1998). This term stems from an original study that focuses on assessing, prospectively and retrospectively, the long-term impact of adverse events such as abuse and family dysfunction during childhood on the functioning and outcomes of adults (Felitti et al., 1998). The original study was used to provide an overview of the impact of exposure to abuse and the relationship it may have with several categories that may serve as underlying risk factors for diseases and illnesses that are some of the leading causes of death among adults (Felitti et al., 1998).

The category of ACEs not only includes abuse during childhood and family dysfunction, but it could also include experiencing poverty, personal or the illness of a family member in childhood, as well as general instability and ongoing stress (McEwen & Gregerson, 2019). Ongoing research suggests many protective factors that may serve a monumental role in preventing or mitigating the impact of these experiences, which are often, if not always, out of the child's control. These factors include positive peer networks, families with strong social support, and families that engage in activities that are fun and positive and create a sense of community within the family unit (McEwen & Gregerson, 2019).

Impact of the Sibling Relationship

One key preventative and protective factor for ACEs is close, fun, and positive relationships within the family unit, including peer support. This notion supports the idea of a close sibling relationship. Very little research on this specific relationship exists, as compared to other familial relationship pairings; however, what is known about this relationship suggests high importance. The current research notes that the sibling relationship is the longest-lasting relationship that one may have in their life (Gilligan et al., 2020).

The sibling relationship is ever-changing throughout the lifespan. In childhood, siblings act as close friends, confidants, and teammates. In late childhood and adolescence, some siblings may still act as friends, while others may begin to experience conflict. This conflict may continue throughout young adulthood and adulthood, while many siblings return to the friend and confidant role, once again. The sibling relationship is known to have a significant impact on the emotional and behavioral regulation of individuals (Buist et al., 2018; Dijk et al., 2021; Geerts-Perry et al., 2021), the social functioning of the individual (Campione-Barr and Killoren, 2019; deBel et al., 2019; Hovland & Hean, 2021; Laghi et al., 2018; Rolan & Marceau, 2018), and the overall development of the individual (Campione-Barr & Killoren, 2019; Gungordu & Hernandez-Reif, 2020; Gungordu et al., 2022; Hamwey et al., 2019; Shepherd et al., 2021; Socker et al., 2020).

Impact of Parental Separation or Divorce

As mentioned previously, family dynamics and relationships can be very influential in the well-being of children as they mature into adulthood. One of the more common ACEs is parental divorce or instability of the family unit. As noted, the divorce

rate has fluctuated over the last few decades (Miller, 2017), leading to many instances of broken relationships and difficulties for the children of these relationships.

So far, little is known about the specific impacts of parental divorce on the lives and development of children. Similar to that of the sibling relationship, the research that does exist on the impact of parental divorce primarily focuses on the emotional and behavioral impact (Avci et al., 2021; Kravdal & Grundy, 2019; Pranzato & Aassve, 2019; Sanayeh et al., 2022), the impact on the children's social well-being (Demir-Degadas et al., 2018; Jackson & Fife, 2018; Jurkovic et al., 2001; Laursen et al., 2019), the impact of parental divorce on academic well-being (Baert & Van Der Straeten, 2021; Brand et al., 2019a; Brand et al., 2019b; Demir-Degadas et al., 2018; Ham, 2004; Nonoyama-Tarumi, 2017; Potter, 2010), and the impact of the divorce on the children's developmental wellbeing (Jackson & Fife, 2018; Mikucki-Enyart et al., 2018; Lee, 2018; Willoughby et al., 2020).

Biblical Foundations

Many themes exist within scripture, including togetherness, trust, compassion, forgiveness, prayer, and concern, often referring to the family relationship. The institution of marriage and the stability of the family unit are well discussed in scripture, specifically. References to God's intention for the marital union and the sacredness of the family appear in many books of the Bible. Scripture places high importance on the role of the husband and wife within the context of their relationship as partners as well as the context of their relationship as parents. Scriptures such as Proverbs and Psalm highlight the importance of biblical instruction for the children within the family of God.

Furthermore, scripture speaks on marriage and its position on ending the marital union, as outlined in Hebrews and Matthew. While Scripture maintains many stories and instructions regarding marriage and the importance of the nuclear family, the Bible does not mention the sibling relationship to the same extent. Popular stories centered on sibling relationships include the story of Cain and Abel, and Esau and Jacob. Both of these stories outline sibling rivalry and competition. The Bible also presents the idea of "brothers and sisters in Christ" which provides the imagery of a united family, emphasizing the close bond between siblings.

Problem Statement

Current literature states that parental divorce or separation can lead to significant implications for the emotional and behavioral health, academic success, and social well-being of the children (Demir-Dagdas et al., 2018). These social, emotional, and academic implications are known to impact the children of divorce in the weeks to a month following the dissolution of the family into adolescence and adulthood, impacting social and romantic relationships (Jackson & Fife, 2018; Sumari et al., 2020; Lee, 2017; Willoughby, 2020; Mikucki-Enyart et al., 2018), emotional and behavioral health in adolescence and adulthood (Avci et al., 2021; Marcussen et al., 2019; Pronzato & Aassve, 2017; Til Ogut et al., 2021; Turunen et al., 2017), and higher education attainment and completion (Baert & Straeten, 2021; Brand et al., 2019b).

The existing literature also suggests that parental divorce or separation can lead to role shifts between members of the family (Jurkovic et al., 2001). In some familial scenarios, siblings, typically older, are forced to adopt specific roles within the family system to "fill in" and for the system to run smoothly, such as caregiving or mentoring

roles. This role shift jeopardizes the family hierarchy, as highlighted within the family ecological systems approach. Within the family ecological systems perspective, families are organized within a hierarchical system that allows for reciprocal relationships between members. When a threat to the family system occurs, such as parental divorce or separation, this hierarchy will be thrown off and create new boundaries or dynamics between the hierarchal system (Whiteman et al., 2011).

One of the key, and arguably the most critical, relationships within this hierarchal system is the sibling relationship dynamic. The current literature suggests the importance of the sibling relationship and the role the sibling relationship plays in promoting social and emotional functioning through the development of empathy and attachment, as well as serves as a source to build resilience for difficult times in life (Gungordu & Reif, 2020; Gungordu et al., 2022; Pace & Steel, 2019; Davies et al., 2019; Dijk et al.,2022; Spitze & Trent, 2018). Prior literature fails to make a concrete connection between the benefits of the supportive nature of the sibling relationship, the adverse implications of parental divorce or separation, and the role or hierarchal shift caused by this life event. Further research will need to examine the relationship between perceived sibling relationship quality and the presence of parental conflict, as measured by post-divorce parental conflict. Additionally, further research will need to explore the relationship between the sibling relationship during parental divorce and mental health symptoms in adulthood.

The study addressed gaps in the research by investigating and examining how the sibling relationship is impacted amidst a parental divorce and how this relationship impacts present mental health symptoms. This was done in three parts. First, by examining participant's reactions to parental divorce conflict, measured by the Post-

Divorce Parental Conflict Scale (PPCS). Second, by examining the sibling relationship in childhood and adulthood using the Lifespan Sibling Relationship Scale (LSRS). Third, by examining participant's mental health symptoms as reported using the General Health Questionnaire (GHQ-12).

Purpose of the Study

The purpose of this quantitative survey study is to examine the relationship between post-divorce parental conflict and perceived sibling relationship quality for siblings who experienced the impact of parental divorce. This study also examined the impact of a positive sibling relationship during parental divorce on the mental health of children of divorced parents in adulthood.

Research Question(s) and Hypotheses

Research Questions

RQ1: What is the relationship between post-divorce parental conflict and perceived sibling relationship quality?

RQ 2: What is the relationship between positive sibling relationships during parental divorce and mental health in adulthood?

Hypotheses

Hypothesis 1: There is a positive correlation between a high level of post-divorce parental conflict and positive perceived sibling relationship quality.

Hypothesis 2: There is a negative correlation between positive perceived sibling relationships during parental divorce and high levels of psychological distress, as indicated by the score on the General Health Questionnaire.

Assumptions and Limitations of the Study

The study included several challenges and limitations. First, the initial recruitment strategies appeared to inadequately recruit or market to the unique target population. Participants appeared more responsive after including additional recruitment measures such as posting in social media groups and sending a recruitment email to academic groups. In addition, the lack of a monetary incentive to participate may have served as a deterrent for some participants in the early stages of recruitment and data collection.

Prior to data collection, anticipated limitations to the study included difficulty in recruiting participants via the social media and word of mouth route, as well as concerns about participant's willingness to complete the entire survey. These assumptions appeared accurate as the initial wave of recruitment yielded less than half of the participants needed to meet the convenience sample.

The ability to control for the diversity of participants was another limitation of the study. Due to the nature of recruitment, it was difficult to control the age, gender, or race of the participants. While the study was open to all individuals, as long as they met the essential eligibility criteria, it was difficult to ensure an equal or representative amount of any group or category in the final sample. Ultimately this may impact the ability to generalize findings.

A potentially impactful assumption of the study includes the assumption that the children of the divorced parents (participants) are from a male-female parent group. This then proposes the limitation that participants who may have come from same-sex parental pairings may not be adequately or accurately represented in the final sample. Additionally, participants who may identify within this group, may not have felt the

questions represented their situation and therefore chose not to complete the study altogether.

Theoretical Foundations of the Study

When considering a study relating to the emotions, behaviors, and actions of individuals, it is vitally important for a researcher to root their understanding in relevant theoretical frameworks. Two essential theoretical frameworks to consider regarding this study are attachment theory and the family ecological systems perspective. Both theories are popular within the social science field and often serve as the theoretical basis for many social service practices and further research studies.

Attachment Theory

Attachment theory, as discussed by Pace (2020), proposes that children develop their view of self, others, and their view of relationships, otherwise known as Inner Working Models, from their caregivers. Children often base these perceptions on how their caregivers, typically their parents, respond to their physical and emotional needs as young children, and then as they continue to develop. (Pace, 2020). These Inner Working Models (IWM's) often serve as the foundation for future relationships through childhood and adolescence, specifically the desire for connection with others, like siblings, teachers, peers, and romantic relationships. (Pace, 2020). It is believed that secure attachment in the early years can lead to healthy and adaptive development, whereas insecure attachment in the early years can lead to disorganized and poor social adaptation through childhood and possibly into adolescence (Pace, 2020).

This theory focuses primarily on the early bonds found between infants and their caregivers, such as parents, which is considered crucial to the child's survival through this

period of development. As the child continues to develop, the attachment figure can become a secure place in which the child can feel comfortable exploring other parts of the world, returning for a sense of security and comfort. The loss of an attachment figure, however, can lead to intense anxiety and distress. This is important to note when considering the impact of family separation due to parental divorce. (Whiteman et al., 2011).

Family Ecological Systems Perspective

Early psychological theory proposed that dysfunctional and conflictual marital relationships often cause tumultuous and dysfunctional behavior in children. It was long believed that a child's behavior or emotions within the context of divorce were often a result of poor parenting or the "bad" marital relationship between the parents. Because of this belief therapy and theory primarily focused on addressing the dysfunctional marital relationship as a means to treat the unwanted behavioral issues within the children. Since then, theorists have come to reconceptualize the understanding of the relationship between the dysfunctional parental relationship and the dysfunctional behavior patterns of the children. It is now believed that the family operates as a "cybernetic system in which the actions of each member influence the actions of each other member reciprocally" (as cited in Rose & Saposnek, 2004). This proposes that the child and the marital issues do not have an "unidirectional cause-effect relationship" as previously predicted but rather influence each other in a more reciprocal exchange. (Rose & Saposnek, 2004).

The family systems perspective focuses on the larger context of the family and the relationships within it. Within this perspective, the family is hierarchically organized,

consisting of independent, reciprocally influential relationships that are typically also categorized by smaller subsystems, such as the marital relationship or sibling relationships. This perspective also includes the influence of extended family members such as grandparents, aunts and uncles, and cousins. Typically, the subsystems within the family have flexible, yet mutually agreed-upon boundaries. Rigid boundaries within a family system are often an indication of family dysfunction. The family systems approach also focuses on the process of the family system. Typically, families can adapt to changes in internal and external needs by supporting each other. (Whiteman et al., 2011). This framework becomes particularly important when considering the impact that a parental divorce or separation may have on a child's well-being, as well as the impact of the sibling relationship on the child's reaction to the parental divorce.

The Stages of Divorce

Dr. Donald Saposnek, a clinical child psychologist and child custody and family mediator, and Chip Rose, a highly experienced divorce mediator, propose that many divorce researchers describe the divorce process in stages. Rose and Saposnek (2004) clarify that while many stages are considered linear, the divorce process can be a little more tangential in which a couple may skip a stage or come back to an earlier stage depending on their unique family situation. (Rose & Saposnek, 2004).

Pre-divorce and Deliberation Stage

The first stage is the pre-divorce or deliberation stage. This stage takes place before the separation is discussed, in which one party is experiencing feelings of dissatisfaction within the marriage. This party will often spend months to years in deliberations as to how to resolve the issues within the relationship.

Often this person will try many different ways and strategies to cope with the dissatisfaction before a conversation or decision to separate is reached. These attempts could include but are not limited to, anger, arguing, crying, withdrawing, provoking the other spouse to change, and in some cases, extra-marital affairs, or abuse. Some couples choose to go the counseling, which is effective in addressing issues of communication, but may not address underlying feelings of despair or hopelessness within the marriage. This then may lead Party 1 to decide that they have emotionally removed themselves from the marriage and announce to their spouse that they would like a separation. This declaration could trigger an emotional reaction within the spouse, Party 2, that could evoke anger or denial. Party 2 goes through a similar pattern of emotional evaluation and may resort to hurtful comments, shaming, or manipulation in which they make Party 1 feel as though they cannot survive outside the marriage. (Rose & Saposnek, 2004).

Legal Divorce or Litigation Stage

After both parties have processed their respective emotions and contemplation of the marriage and its subsequent end, one party, typically Party 2 will seek legal advice. Every divorce is different, as are the reasons for the divorce. Sometimes the "leaver" or Party 1 will file for divorce, while oftentimes times the "left" or Party 2 will file for divorce as they feel they have a sense of control over the situation. It is at this stage that litigation for legal divorce begins, and divorce professionals become involved. This could include attorneys, real estate appraisers, mediators, accountants, therapists, evaluators, and judges. During this stage, both parties can experience many emotions including relief,

sadness, and loneliness, or anger, hostility, and ambivalence. This is the stage where conversations between the divorcing couple can get “nasty”, hurtful, or vindictive. (Rose & Saposnek, 2004).

According to Rose and Saposnek (2004), during the litigation stage, each party often has conversations with their respective divorce professionals about four key areas. Economic concerns, custody concerns (if applicable), negative restructuring of spousal identity. (Rose & Saposnek, 2004).

A central concern for both parties is economic survival and the expense of splitting the household into two. As with any financial conversation, strong emotions may emerge. This is when attorneys may make negotiations on behalf of each party to gain leverage and control. Mediation is an alternative to attorney negotiations, in which the parties are empowered to advocate for themselves and do so directly and constructively. (Rose & Saposnek, 2004).

The second topic discussed is often custody concerns. This is another contentious debate as “about 60 percent of divorcing couples have minor children” (as cited in Rose & Saposnek, 2004). Of these, about 85 – 90 % of couples can come to a custody agreement, while the other 10 – 15 % are unable to reach an agreement, further prolonging the litigation process, accompanied by the emotions and conversations that come along with it. Mediation is becoming more popular among local jurisdictions as it, again, empowers each party to advocate for their position on the well-being of the children involved. Mediation has shown to be successful in about 50-75 percent of cases, while in some cases it has proven to be unsuccessful, in which litigation continues. Custody litigation has been

referred to as “the ugliest litigation” (as cited in Rose & Saposnek, 2004) because of the emotion, intense bitterness, allegations, and distortions of life events and personalities, which only further enhance the acrimony between the parents and creates a significantly destructive influence on the children of divorce. (Rose & Saposnek, 2004).

The third topic discussed among each party and their divorce professionals is the negative reconstruction of spousal identity. This is the phenomenon that is characterized by the tendency of one party to cast the other in a defamed image. Often one party will selectively remember all of the negative or polarized characterization of the other spouse therefore creating an altered image in which they perceive only the events that fit this narrative. Often this narrative is reinforced by helping professionals such as therapists and attorneys as they try to offer their support for their clients, which may then lead to further conflict. (Rose & Saposnek, 2004).

Transition Stage

The transition stage can overlap with the litigation stage, and typically occurs about one to two years after the initial separation and is often viewed as chaotic. Within this stage, the spouses are learning to live their lives apart from what they once knew. Many times, they feel pressure and insecurity, they may feel panicky or alone and have to find new ways of adjusting to their new single identity and defining themselves in a relationship to themselves versus within a couple. As the divorce is finalized and agreements are made regarding economics

and custody, the chaos begins to settle down, entering into the post-divorce stage. (Rose & Saposnek, 2004).

Post-Divorce Stage

This stage often includes exploration, redefinition, and redirection; this is when each spouse makes independent choices based on their single life. One spouse may reenter the workforce or find a new hobby or purpose. If the couple had kids, this is the stage in which each spouse may be working to help their children accept the divorce. If the divorce was reached amicably, each spouse may try to promote the child's relationship with the other parent, while this scenario may play out very differently if the divorce was not reached amicably. Often there are many negative emotions still lingering which could impact how each spouse speaks of their ex-spouse, specifically the way they speak about them in front of their children (Rose & Saposnek, 2004).

Biblical Theoretical Perspective

Scripture contains many themes related to the family. Themes include the family relationship the marital relationship, and the sibling relationship.

When considering this unique relationship and the family unit, it is crucial to consider it within a biblical context. The Bible instructs parents, as the family's leader, in Proverbs 22:6 to "Train up a child in the way he should go, even when he is old he will not depart from it." God intends to have parents lead their children to live a godly servant life for the betterment of all humankind. Additionally, Psalm 127:3-5 states, "Behold, children are a heritage from the Lord, the fruit of the womb a reward. Like arrows in the hand of a warrior are the children of one's youth. Blessed is the man who fills his quiver

with them! He shall not be put to shame when he speaks with his enemies in the gate". (*English Standard Version Bible*, 2001). This reminds parents, as the leaders of their family, to invest love and knowledge into their children, for they are the future of their earthly family and God's family. Both highlight the importance of the family relationship and the importance that it holds for the human race, solidifying the importance of investing in children and supporting them in the best way possible despite the hardships of this earthly life.

Subsequential themes include the marital relationship and the sibling relationship. The sacredness and value that is placed on the Christian marriage is well known through scripture. Many passages denounce the idea of divorce and separation as seen in Hebrews 13:4 and Matthew 19:9. In both instances, scripture supports the maintenance of the nuclear family above all other worldly temptations.

Another key theme discussed in this study, but not as readily within scripture, is the sibling relationship. The Bible seems to primarily give negative examples of the sibling relationship, as seen in Genesis 4 with Cane and Abel, and again in Genesis 25 and 23 with Esau and Jacob. These stories outline rivalry and jealousy, other themes denounced throughout scripture. Other mentions of “brothers” and “sisters” relate to the larger Christian community and provide the imagery of a united and bonded family.

Definition of Terms

The following is a list of definitions of terms used in this study.

Adverse Childhood Experiences (ACEs) – Adverse childhood experiences refer to potentially traumatic events or experiences that occur in childhood and typically involve maladaptive environments (Felitti et al., 1998).

Parentification – Parentification refers to the distortion or lack of boundaries among family systems, typically between parents and their children, in which children typically take on roles and responsibilities more appropriate for adults. For example, many children will take on caretaking roles or other behaviors that help maintain stability and balance within the home, such as emotional support for siblings or parents (Hooper, 2008).

Academic performance/ functioning – Academic performance or functioning refers to the ability to complete education-related tasks sufficiently and is measured by grade point average. (Brand et al., 2019a)

Social Functioning/ Well-being – Refers to an individual's interpretation of the social relationships they carry, how others in their social circle react to them, and how they interact with social institutions and their community. (Cicognani, 2014).

Kin keeping – Refers to keeping family members in touch with one another or keeping the order and process of the family running smoothly. (Reis et al., 2009).

Significance of the Study

Popular research studies in psychology and the social sciences suggest the impact of adverse childhood experiences (ACEs), which are known to significantly impact the lives of children who experience them (McEwen & Gregerson, 2019). The current research in this area suggests that this sibling relationship is foundational for other future relationships as children and adolescents continue to grow throughout their lives. Many sources have named the sibling relationship as the longest-lasting relationship and arguably the most critical relationship in one's life (Gilligan et al., 2020; Geerts-Perry et al., 2021). The current research on the impact of parental divorce has also suggested the

importance of outside relationships and social support to help mitigate some of the social-emotional effects of parental divorce.

While prior research in both areas suggests significant implications on the social, emotional, and academic well-being of children, very little research has been done on studying the relationship between sibling relationships and parental divorce. This study explored and examined the intersection between sibling relationships and the presence of parental divorce conflict. Many hypothesize that a positive perceived relationship quality will align with higher parental conflict, suggesting that the positive impact of the sibling relationship may mitigate the adverse effects of parental divorce. Findings from this study will help inform the field of psychology and social sciences as it will lend evidence to support attention to the sibling relationship during parental divorce and separation. Professionals such as teachers, school administrators, therapists, social workers, and other supportive professionals may benefit from the learned knowledge expected from the completion of this study.

Summary

In conclusion, it is known that ACEs are widely discussed in literature today, focusing on the impact that these potentially traumatic events can have on the lives and development of those who experience them. It is known that these events, like parental divorce, can negatively impact the children's emotional and behavioral well-being, social development and social functioning, academic functioning, and overall development into the next phase of life through adolescence into adulthood. Many researchers also believe that relationships like sibling relationships have a positive impact on many of these areas of development and may serve as a protective or mitigating factor for ACEs.

The study examined how the potential positive impact of the sibling relationship may help protect or mitigate the adverse effects of parental divorce. It explored how the parental divorce impacted the participants and their development into adulthood while also examining how participants viewed their sibling relationship then, during the time of the parental divorce, and now, as adults. Results from this study will help inform social service professionals working with children of divorced parents to nurture and protect this sibling relationship during this challenging and potentially traumatic time.

Upcoming chapters will describe the areas addressed in Chapter 1 in more detail, precisely the significance of the study, the purpose of the study, research questions and hypotheses, and assumptions and limitations. These chapters will also examine what is currently known, prior to the current study, regarding sibling relationships and the impact of parental divorce. Chapter 2 will include this literature review, and a description of the search strategy, while Chapter 3 will focus primarily on the research method of the study.

CHAPTER 2: LITERATURE REVIEW

Overview

The current literature within the field of psychology and related social science fields only touches on the intersection between the impact of parental divorce and the role of the sibling relationship as a mitigating factor. The sibling relationship is one of the most important relationships in one's life for many reasons, including social and relational influences (Gilligan et al., 2020; Geerts-Perry et al., 2021). Research also points to the importance of the parent-child relationship and the impact a divorce or separation may have on this relationship (Demir-Degadas et al., 2018). Before launching a specific analysis of this impact, it is first necessary to understand the impact of parental divorce on the children and the role or impact of the sibling relationship on sibling wellbeing.

This review will begin by exploring adverse childhood experiences (ACEs) and the impact they have on the lives of those who experience them. The rate of divorce and common themes within divorce research will also be briefly discussed before the analysis regarding the impact of parental divorce. The literature on the effects of parental divorce focuses on four crucial areas of impact: emotional and behavioral, social functioning and well-being, and overall development through the lifespan into adulthood. This review will then focus on the impact of the sibling relationship and a child's well-being in these four areas. Finally, this review of literature will focus on the biblical implications and foundations of the study and how the bible can be used as a guide for further understanding the intended order of these sacred relationships.

Description of Search Strategy

The researcher used electronic databases to collect the literature and past research articles for the literature review. These databases included the online database function at the Jerry Falwell Library at Liberty University and Google Scholar. The researcher used the primary Google search function to find some US Divorce statistics and the CDC website. The keywords used were the following: *the impact of the sibling relationship, impact of parental divorce, sibling relationship, and parental divorce, parental divorce and academic functioning, emotional and behavioral implications of divorce, the benefit of the sibling relationship, sibling relationship later in life, rate of divorce, marriage statistics among children of parental divorce.* Delimitations were articles published within the last five years of the beginning of data collection. Bible Gateway was used to research scriptures for the biblical foundation.

Review of Literature

Adverse Childhood Experiences (ACEs)

The sibling relationship is known as the longest and most significant relationship in one's life. Often, individuals who grew up with a sibling may tell stories of disagreements and fighting, sharing clothes intentionally or not, or sharing secrets. Some siblings, however, may tell stories of connection, comfort, guidance, and comradery. It is believed that in some instances, these relationships may act as a buffer for more severe life events, such as trauma, bullying, or environmental stressors, such as parental divorce or separation.

These traumatic or damaging events are more popularly referred to as Adverse Childhood Experiences or ACEs. ACEs are widely documented and discussed in prior literature on children for their impact on impaired functioning in adulthood (Dong et al.,

2021; Hong et al., 2018; Jaffee et al., 2018). In the more extensive CDC-Kaiser Permanente adverse childhood experiences study, researchers found that almost two-thirds of the study's 17,337 participant sample reported at least one ACE and more than one in five participants reported the presence of three or more ACEs. ACEs are potentially traumatic events or experiences that occur in childhood and typically involve maladaptive environments (Felitti et al., 1998). These events could include experiencing or witnessing abuse, neglect, or violence in the home or the greater community, having a family member attempt or die by suicide, growing up in an environment with substance use problems, mental health problems, or instability due to parental separation or a family member's absence due to incarceration. Each aspect of the environment may threaten or undermine the child's sense of safety and stability (Centers for Disease Control and Prevention, 2019). The intended purpose of this study was to examine the impact of traumatic childhood events on adult health. Of the more than 17,000 participants, almost 70% reported at least one ACE and about 10% reported that they experienced four or more ACEs in their childhood (Ports et al., 2020).

ACEs have been known to have lasting effects on the well-being and health of those who experience them. These include educational and occupational difficulties, health-related consequences such as the risk of injury or sexually transmitted diseases, chronic diseases such as heart disease, cancer, diabetes, and risk of suicide (Agbaje et al., 2021; Boyraz et al., 2019; Dong et al., 2021; Felitti et al., 1998; Ports et al., 2020; Merians et al., 2019). In addition, ACEs can also lead to common social determinants of health such as living in under-resourced areas, which can lead to toxic stress (McEwen & Gregerson, 2019). Toxic stress is known to lead to issues with brain development, issues

with a child's immune system, and stress reasons systems, which in turn impacts the child's attention, learning, and decision-making (McEwen & Gregerson, 2019). Children who grow up with toxic stress can experience difficulties forming stable and healthy relationships with others which can lead to unstable educational and occupational outcomes in their adult years. (McEwen & Gregerson, 2019). In many scenarios, adults who grew up with toxic stress as a child may also pass down these effects to their children, creating historical and ongoing trauma (McEwen & Gregerson, 2019).

Because of the heavy consequences and implications of ACEs, many researchers have done extensive research on not only potential risk factors for continued exposure but also potential protective factors. The CDC outlines several individual and family protective factors that support the idea of interpersonal relationships and involvement. They mention families who can create safe environments and nurturing relationships where children feel loved and supported (McEwen & Gregerson, 2019). In addition, Children who have positive friendships and peer networks, families with strong social support networks and positive relationships with the people around them, and families that engage in fun, positive activities together. (McEwen & Gregerson, 2019). Each of these three protective factors mentioned could be and often are, found within the sibling relationship.

Divorce Statistics

An unfortunate trend in marital relationships is the likelihood and frequency of divorce. A previous statistic for the past few decades suggests that more than half of all marriages end in divorce (Miller, 2017). Data reported in 2014 suggests that the divorce rate may not be this frequent, however, it is significant enough to remain concerned

(Miller, 2017). To understand this ebb and flow in divorce rates, it is first essential to consider marriage trends over the past few decades.

More recent statistics suggest that the divorce rate has decreased since 2008, most notably for women. The results of this analysis, conducted in 2019, suggest that the divorce rates for older women have appeared to increase slightly as compared to previous statistics, however, the analysis shared that the divorce rate for women over 45 remained steady over the last decade. (Cohen, 2019). It is also projected that divorce rates will continue to decline over the next decade due to societal shifts that are believed to reduce the odds of divorce. (Cohen, 2019). These shifts include, individuals, choosing to enter their first marriage at an older age as compared to statistics in 2008 (Mayol-García et al., 2021), birth control, and the rise in "love marriages" may contribute to a drop in divorce rates, as well as critical societal shifts in women's rights which may empower women to make their own choices regarding marriage (Miller, 2017).

While some believe societal shifts may contribute to the ebb and flow of divorce rates, some believe that child rearing and the birth interval between children may be contributing factors. Berg, et al. (2020) provide results from a study on birth intervals that suggests that divorce rates could be attributable to birth intervals as they state that shorter birth intervals could be attributable to the risk of parental divorce. Further, they explain that individuals with birth intervals of up to 1.5 years had a 24-49 percent higher divorce risk compared to individuals whose children were born more than 4 years apart (Berg, et al. 2020, p.1). Berg, et al. (2020) were unable to provide further reasoning as to why this is believed, however, the findings of their study appear to offer an intriguing insight.

In a study conducted to find gender differences in the consequences of divorce, Leopold (2018) found that men were more vulnerable to short-term consequences of divorce, but post-divorce adaptation alleviated the differences. The second finding was that the outcomes showed more similarities than differences between men and women in areas related to mental and physical well-being, caring for the household, and social well-being. The third significant finding suggests that women typically experience a disproportionate loss in household income which is associated with a higher risk of poverty and single parenting. The overall findings of this study suggest that the strain of divorce is disproportionate between men and women as the strain is transient for men but chronic for women (Leopold, 2019).

Not only does divorce directly impact the two individuals who are choosing to end their marital union, but it also impacts their children as divorce has been known to negatively impact the quality of parental childrearing skills due to stress. (Jackson & Fife, 2018). Additionally, divorce and other adverse life events such as poverty, parental marital problems, mental health problems, lack of parental involvement, or domestic violence, appear to present a significant risk for children's well-being during critical growth years (Demir-Degadas et al., 2018).

Summary of Current Research on the Impact of Parental Divorce

As the divorce rate continues to ebb and flow with social trends and other environmental factors, it is essential to consider how this will impact not only the couple who is choosing to separate but any potential children. Specifically, the emotional, social, academic, and long-term effects that this adverse event can have on the life and development of the children caught in the middle of this inevitable chaos. To begin

examining this impact, it is first appropriate to acknowledge the uncertainty and difficulty of generalizing the findings of prior literature. Not all results or discoveries are relevant or can be applied to each unique family situation, however, there are some intriguing commonalities among the literature in this area.

Emotional and Behavioral Health Impact of Parental Divorce

Due to the rising trends in divorce and familial separation, many researchers choose to explore the cognitive and behavioral outcomes of children who have experienced parental separation. Utilizing a sample of about 9000 children as old as 11 years old, Pranzato and Aassve (2019) found that parental separation had detrimental effects on the child's behaviors and these effects appear to stagger after a few years after the initial separation. The research suggests that children of divorce experience significant mental health symptoms as a result of the dissolution of their family due to parental separation or divorce. Some suggest that the age of the child at the time of parental separation may have an impact. In a study seeking to assess whether or not the age of a child at the time of parental divorce is associated with mental health symptoms such as depression, as indicated by the purchase of medicine used to treat depression, researchers found the association was only evident in women and participants whose mothers had low to no formal education (Kravdal & Grundy, 2019). The data in this particular study appears to only partially support this idea that the age of the child may be a significant factor; however, it is interesting when considering what this might mean for female children and their eventual romantic or marital relationships in the future, which will be discussed later on in this review.

In addition to the concern surrounding mental health symptoms such as depression and anxiety, researchers, and professionals in the field of social welfare suggest that parental separation could lead to behavioral changes in the children such as physical aggression and anger due to post-divorce parental conflict (Avci et al., 2021). Additionally, parents and social service professionals see an increase in risk-taking behaviors among children of divorce. In a study done to examine the timing of first alcohol, cigarette, and marijuana use in children who experienced parental loss due to parental death or parental divorce, Doran, et al. (2019) found that parental divorce is a risk factor for early-onset alcohol and drug use, especially among females.
Building off these findings, Sanayeh, et al. (2022) explored parental divorce and nicotine addiction in Lebanese adolescents, researchers found that 11.9% of the participants had divorced parents and higher cigarette dependence was found in adolescents with divorced parents compared to adolescents with parents who were living together. In continuing their research, researchers found that children of divorced parents were more likely to have experienced more child psychological abuse, which was associated with higher cigarette dependence. The findings of this particular study and the one conducted previously by Doran, et al. (2019) suggest the increased need for prevention programs to create a protective and supportive environment, specifically for children and parents of divorced families. (Sanayeh et al., 2022).

The increased presence of emotional and behavioral changes in children of divorced parents suggests not only the need for prevention programs but also a supportive environment, specifically parental support. Parental support has always been an important predicting factor for children's self-esteem, which helps support other important life

outcomes. Because of the frequency of divorce and parental separation, children often split their time between both parents, missing the influence of the other while they are with one parent. It is believed that children who live in a two-parent home report more parental support than those in divorced or separated homes. In a study conducted to examine children's self-esteem within the context of family types, researchers found that there was no difference in the self-esteem levels of children who lived equally as much with both parents and those in nuclear families (Turunen et al., 2017). The difference occurred in children who lived with one parent as they showed lower self-esteem as compared to the children in other living arrangements. It appears that children who are in the care of a single parent experience the most difficulty with self-esteem as compared to children who live in joint physical custody arrangements or within the original nuclear family (Turunen et al., 2017).

Social Impact of Parental Divorce

The second area of concern, after the emotional and behavioral health of children of divorced families, is the social implications of this familial separation. Family dissolution is a common occurrence as about one-third of children in most Western countries experience some form of family dissolution whether it be a result of parental divorce, separation, or parental death. In a study investigating the association between family dissolution and the social well-being of children within the school setting, researchers found that about 5% of participants had low social well-being. Of the children who were living in dissolved families, 31% experienced a low level of social well-being, especially if the children were of preschool age at the time of family dissolution. (Laursen et al., 2019). These findings suggest that family dissolution does significantly

and negatively impact children of divorce, most notably preschool-age children, who arguably, could be the most vulnerable.

Social well-being in school and other settings appears to be a significant concern among researchers in this area, however, the primary concern or impact among children of divorce is their relationship with each of their parents. Negative parent-child relationships are believed to begin as early as 8-12 years before the divorce and may eventually lead to the divorce due to parental conflict. Typically, when parents neglect the needs of their children, due to marital stress, the children may exhibit negative or problematic behavior towards the parents, which in turn negatively impacts the parent-child relationship (Demir-Degadas et al., 2018).

The parent-child relationship, specifically in childhood can have a significant impact on the child's social life moving forward, in individuals impacted by parental divorce, the quality of social support had a positive relationship with career expectations and romantic relationship confidence, however, this effect might differ depending on cultural or ethnic influences (Jackson & Fife, 2018). Jackson and Fife (2018) primarily focused on the importance of the parent-child relationship, but also the influence of other family relationships, such as family or friends. They found that the amount of social support received was not particularly impactful on the participants' romance or career confidence however the quality of the perceived satisfaction had a more significant impact on participant confidence (Jackson & Fife, 2018). These findings suggest that the level of social support at a young age has a direct impact on confidence which will eventually impact the individual's ability to engage with others as they move through development into adulthood.

The prior research on the impact of parental divorce has focused heavily on the parent-child relationships. Additional research also focuses on the functionality of these relationships post-divorce, specifically in single-parent homes. Typically, these relationships function collaterally rather than hierarchically, meaning that one or more children may adopt a "junior partner" role within the parent-child relationship. In some ways, this role may be beneficial as it fosters a level of independence and maturity in older children, especially if their developmental needs have already been met, however, this junior partner role may stress younger children, especially if their developmental needs have not been met (Jurkovic et al., 2001).

Furthermore, this "junior partner" role assumption introduces the issue of the parentification of children. Jurkovic, et al. (2001) assert that this parentification of children after divorce places children in the role of emotional and instrumental caregiving, assuming that the need for caregiving would increase post-divorce. However, the results of their study showed that this was not necessarily the case, however, participants of divorce homes reported an increase in emotional caregiving of their family when they were adults as opposed to when they were children (Jurkovic et al., 2001). It appears that the findings of this study suggest a long-term role assumption as the need for caregiving continues through childhood, adolescence, and adulthood.

Academic Impact of Parental Divorce

The third area of concern surrounding children of divorced parents is the impact of parental divorce on education and academic performance. Brand, et al. (2019a) note, that families that anticipate familial stability may experience adjustment difficulties due to being unprepared for the disruption of the family unit due to divorce, which is believed

to lead to adverse outcomes for their children, as compared to children whose parents were likely to divorce or were already experiencing marital conflict. (Brand et al., 2019a). In Brand, et al. (2019a; 2019b), the unknown or unexpected dissolution of the marriage appears to significantly impact outcomes such as education due to stressors related to the decrease in family income, and change in family structure, among other stressors.

Prior research on the impact of parental divorce on the children's overall well-being focuses on changes in finances, decreased parenting practices or quality of parenting, parental conflict, and deterioration of the child-parent relationship. Daniel Potter (2010), suggests that the child's diminished psychosocial well-being following divorce may be worthy of exploring, given a perceived decrease in academic achievement among these children of divorced parents. Following analysis of the data collected from the Early Childhood Longitudinal Study-Kindergarten cohort (ECLS-K), Potter (2010) finds that parental divorce was associated with diminished psychosocial well-being and that this decrease can be attributed to the relationship between divorce and lower academic achievement in children of divorce (Potter, 2010).

Building upon the findings of Potter (2010) additional research, predating the findings of Potter (2010), suggests that the current family structure can play a significant role in adolescents' grades and attendance. In a study aimed and comparing academic performance between adolescents from intact homes and adolescents from single-parent or remarried homes, researchers found that adolescents from intact homes performed better academically and maintained better school attendance as compared to students from single-parent or remarried homes. Specifically, this study found that students from

intact family systems had GPAs that were about 17% higher than their peers from single-parent or remarried homes, and individuals from these single-parent or remarried homes missed about 78% more class periods than those from intact family systems. (Ham, 2004).

One of the many challenges related to parental divorce is the presence of single-parent households. In a study done to examine the educational achievement of children from single-mother and single-father families in Japan, researchers found that children of single-mother and single-father families perform lower, academically, as compared to their peers of two-parent families. For children of single-mother families, about 50% of the disadvantage was attributable to a lack of economic resources, while for children of single-father homes, the disadvantage was attributable to a lack of parenting resources such as discussions at home, supervision, and involvement in school. The findings from this study shed light on the division of labor among spouses and how children of divorced families may miss out on crucial support as evidenced by a lack of academic achievement. (Nonoyama-Tarumi, 2017).

These findings shared by Nonoyama-Tarumi (2017) appear to have the ability to be applied cross-culturally as a Greek study presents a similar result. This study showed that teachers who rated preschool students on their school performance rated students from a separated or divorced household as “average,” while they used ratings such as “excellent” for children who were from married or intact homes (Demir-Degadas et al., 2018).

The impact of parental divorce on academic performance and educational attainment is not limited to Elementary, Middle, and high school but throughout the

child's educational trajectory beyond high school. Research suggests that the negative impact of parental divorce goes beyond high school as it stunts educational attainment, specifically college education (Brand et al., 2019b).

Some research suggests that the impact of parental divorce is at its peak during the pre-divorce conflict stage and the first few months into the divorce, but the impact may lessen as time passes following the divorce (Demir-Degadas et al., 2018), while other researchers suggest that the impact peaks within the school year of the divorce (Baert and Van Der Straeten, 2021). Regardless of the "peak" time, it appears that the impact of parental divorce has a significant impact on school-aged children and may significantly impact their developmental trajectory as they mature through adulthood.

Developmental Impact of Parental Divorce on Later Life

While much of the prior research discussed in this literature review has focused on children and adolescents who experience divorce, it may be essential to consider adult children of divorce and the impact it may have on their development or their understanding of self. Adult Children of Divorce (ACOD) are often faced with an expectation to survive the divorce without scaring, but to be the emotional support for their parents. In many cases, adult children may put forth intense emotional effort and labor to help heal their parents, while sacrificing their emotional well-being and self-care. (Mikucki-Enyart et al., 2018). It appears that older children of parental divorce are taking on the role of emotional and instrumental caregiving, not only for younger siblings but in some instances for their parents. As discussed previously, prior research also suggests that older children are acting as emotional support for their parents. While this idea may

seem helpful, the extra burden could lead to negative implications around self-esteem, and self-worth, as mentioned by Mikucki-Enyart, et al. (2018).

Another area to consider when discussing the impact of parental divorce on the adult lives of children is romantic relationships. Prior research suggests that the relationship a child has with their father and mother may significantly impact their romantic relationships in young adulthood. The findings of this study suggest that the resident father-child relationship during adolescence was critical for the child's satisfaction in their romantic relationships in emerging adulthood, as compared to a nonresidential divorce father-child relationship. Ultimately, the findings of this study suggest that parental divorce leads to one parent leaving the primary household, most commonly the father. This being said, many children of divorce experience the absence of their father, which may lead to significant implications on their romantic relationships as they enter adulthood (Lee, 2018).

Similarly, additional research has suggested that parental divorce can influence the beliefs and orientation toward marriage and committed relationships in children of divorce. Some studies suggest that adult children of divorce often had a fear of commitment or felt unprepared for marriage, despite being in a long-term and loving relationship with a partner (Jackson & Fife, 2018). In a mixed methods study, Willoughby, et al. (2020) explore the links between parental divorce and various aspects of the marital paradigms of emerging adults. Quantitative results showed that parental divorce was linked to multiple negative beliefs related to marriage including less marital importance, less marital permanence, and less marital centrality. Qualitative results revealed many themes among emerging adults who experienced parental divorce. These

themes include a negative overall view of divorce, deprioritization, the importance of marriage, and increased interest in the timing of marriage. It appears that the results of this study suggest an overall negative view of divorce and a hesitant view of marriage given the experience of parental divorce (Willoughby et al., 2020).

In addition to generational or societal views towards marriage, it appears that children of divorce have uncertainty when it comes to marriage, commitment, and building a family. In a study focused on relational uncertainty management in adult children of divorce, researchers examined how adult children of divorce were able to manage relational uncertainty following their parent's divorce. Relational uncertainty is defined as a relational partner's degree of confidence in the relationship; therefore, this study seeks to see if relational uncertainty is impacted by adult children of parental divorce. Relational uncertainty management was measured by the presence of information acquisition strategies. Researchers found that participants revealed two types of information acquisition strategies: deliberate (information-seeking or information-avoiding) and incidental information acquisition. Results of this study suggest that adult children of divorce may have a different level of relationship uncertainty due to stage of life and typical developmental stressors as compared to adolescent children of divorced parents. (Mikucki-Enyart et al., 2018).

Post-Separation Abuse

The research stated above highlights the impact of divorce conflict. Typically, this conflict predates the divorce, however, tensions are only exacerbated by the events of the divorce process. When considering this phenomenon, it is important to acknowledge the possibility of post-separation abuse. Post-separation abuse is defined as "the ongoing,

willful pattern of intimidation of a former intimate partner that includes legal abuse, economic abuse, threats and endangerment to children, isolation and discrediting, and harassment and stalking" (as cited in Spearman et al., 2023, p. 1227). As discussed within the stages of divorce, proposed by Rose and Saposnek (2004), this potential abuse is occurring within the "post-divorce stage", but could certainly begin in the transition stage.

Post-separation abuse is a branch of intimate partner violence, which is gaining traction in the research sector. Practitioners trained to work with the couple and their children will often consider and monitor the implications that this abuse may have on the children. One of the key things to look out for is parental alienation. This can take many forms, including putting a spouse down in front of the children, belittling any gifts that the children might receive from their other parent, withholding important information about the children from the other parent, or telling the children lies about the other parent. Depending on their age, children can be vulnerable to misinformation and manipulation. The level of dependence or attachment to this abusive parent can promote their acceptance of what they are being told. Unfortunately, it is very common for parents to utilize their children as tools or weapons during a separation, which inevitably has a significant impact on the children as discussed previously (Parker, 2023).

Sibling Relationship

Almost all of the previous research on sibling relationships will say that it is one of the longest-lasting, yet potentially the most understudied relationships within the family unit (Gilligan et al., 2020; Geerts-Perry et al., 2021). The sibling relationship is a

complex, yet dynamic relationship that can influence a person's emotional regulation, social interaction, and even romantic relationships later in life.

Emotional and Behavioral Health Impact of the Sibling Relationship

First, it is believed that sibling relationships have a significant impact on children's emotional functioning. In a study examining the influence of sibling relations quality on adolescent depressive symptoms over time, Buist, et al. (2018) found that sibling depressive symptoms predicted adolescent depressive symptoms one year later. (Buist et al., 2018, pg. 1190). These findings inevitably suggest that the emotional state of one sibling can impact the emotional state of the other sibling leading to a continuation or cycle of maladaptive behavior or symptoms.

The sibling relationship has also been known to serve as a buffer for family conflict or rifts in the overall family functioning. Davies, et al. (2019) suggest that high-quality or strong sibling relationships act as a protective factor in neutralizing interparental conflict to potentially prevent an increase in adolescent insecurity. This idea is echoed by Dijk, et al. (2021) who state that a significant amount of sibling support was found to be highly beneficial and often mitigated the impact of sibling conflict regarding self-esteem (Dijk et al., 2021).

In addition to this finding additional studies, examining overall family functioning, sibling relational dynamics, and self-reported adjustment and internalizing symptoms, highlighted the unique role of family function and the sibling dynamic and their contributions to children's functioning. The findings of this study also suggest that sibling relational dynamics may improve treatment planning by identifying targets for intervention or potential sources of support (Geerts-Perry et al., 2021). Again, this

research highlights the importance of solid relationships, specifically the sibling relationship, in overall functioning and sources of support.

Social Impact of the Sibling Relationship

Previous literature suggests that sibling relationship plays an integral role in emotional regulation, self-esteem, and the prevention of depressive symptoms, as discussed in the previous section. Another important area of functioning to consider is the impact that the sibling relationship has on social functioning. The ways that siblings relate to one another and interact with one another appear to set the foundation for other meaningful relationships in their lives. Before diving into these influences, it is first essential to understand the basis of the sibling relationship.

deBel, et al. (2019) argue that it is best to understand relational models before dissecting sibling pair relationships. To do so, deBel, et al. (2019) conducted a study that examines an empirically analyzable relational unit of analysis, which is the sibling-parent-sibling triad. To analyze this relationship effectively, deBel, et al. (2019) test for three relational dimensions which include support exchange, contact, and conflict. Through multilevel analysis, they find that both intergenerational relationships turn out to be significant predictors of the sibling relationship. In addition to this statement, deBel, et al. (2019) assert that the relationship a child has with their mother often predicts sibling support and contact. This idea supports the notion of kinkeeping, which is believed to be perpetuated by female family members. (deBel et al., 2019, p. 2721). These findings suggest that the relationship that a child has with their mother is crucial in their ability to maintain family unity or kinkeeping, de Bel, et al. (2019) asserts that this is primarily

found in female children and is most commonly continued through female family members.

Continuing to consider the sibling relationship, within a family lens, a study focused on examining how family functioning, the degree to which family members feel happy and fulfilled with each other, and demographical characteristics impacted the sibling relationship, researchers found that younger children reported more negative interactions with their sibling than the older age groups (adolescents and young adults), due to a higher level of conflict within the younger years. Additionally, they found that family satisfaction and age predicted behaviors during sibling interactions. (Laghi et al., 2018).

An interesting dynamic of the sibling relationship is that it appears as a complementary relationship, as opposed to a compensatory relationship such as the relationship between and parent and a child (Dijk et al., 2021). When considering the sibling relationship, it is common to find ambivalence, fighting, arguments, or disagreements as this is developmentally appropriate and may be beneficial for children and teens and they continue to develop (Campione-Barr and Killoren, 2019).

Past researchers have found that a common theme expressed in sibling relationships is the idea of comparison and parental differential treatment. Among the limited research on the sibling relationship, Rolan and Marceau (2018) conducted a study intended to explore whether adolescents' self-esteem and sibling relationship characteristics, such as age gap and sibling relationship quality, moderated associations with parental differential treatment and eventual externalizing behavior. Rolan and Marceau (2018) found that higher levels of maternal differential treatment predicted

higher externalizing behavior among older siblings who were either the same age as the sibling and had low self-esteem or sibling who was three years older than their sibling and had higher self-esteem. Higher levels of paternal differential treatment also predicted higher externalizing behavior for older siblings regardless of their level of self-esteem. Maternal differential treatment was protective for adolescents with low self-esteem who were three years older than their siblings and predicted a decrease in externalizing behaviors. The findings of this study highlight how self-esteem and the age gap impact adolescents' perception of paternal differential treatment and how it may positively or negatively impact eventual externalizing behaviors (Rolan & Marceau, 2018).

Because the sibling relationship is one of the first and longest-lasting significant relationships in one's life, it is believed that the sibling relationship has a significant impact on the social outcomes of an individual. In a prior study focused on examining how the number of siblings in childhood impacted social outcomes in adulthood, researchers found that for each additional sibling, an individual grows up with, the likelihood of divorce as an adult declined by 3% (Merry et al., 2020, p. 1). In a follow-up study, Merry, et al. (2020) found similar results related to a negative association between the number of siblings and divorce in adulthood, however, they found mixed results related to other prosocial adult behaviors such as their relationships with their parents, friends, and their views on conflict management with their partner.

A majority of the prior research on sibling relationships focuses on full-blood siblings. An interesting dynamic to consider when discussing the sibling relationship among children of divorced parents is the presence of potential half-siblings. If children were to come from a divorced home, and one of the parents remarried and had another

child, the sibling relationship quality between the original sibling and the new or half-sibling may impact the one sibling's overall reaction to their parental divorce. Tanskanen and Danielsbacka (2019) conducted a study examining whether a childhood with co-residence would predict sibling relationship quality among adult half-siblings. In this study, individuals who have lived with their half-siblings during childhood report a better sibling relationship quality as compared to individuals who did not live with their half-siblings. Also, among the individuals who have lived with half-siblings in childhood, the sibling relationship quality was better in same-sex dyads as compared to opposite-sex dyads. There was no difference in sibling relationship quality between full and half-siblings in cases where they lived together. The findings of this study support that co-residence in childhood tends to regulate sibling relationship quality among adult siblings, specifically half-siblings (Tanskanen & Danielsbacka, 2019).

Additional research on the sibling relationship focuses on siblings who are placed within the foster care system. In a qualitative study focused on young people's perceptions of the changes that occur related to the quality of sibling relationships and the pathways that these relationships follow during the transition from the biological family into child welfare care, researchers found that the sibling relationships reshaped into close and supportive, conflictual, or completely broken relationships. Ultimately, they found that the sibling relationship quality before placement did not predict the sibling relationship quality after the children were admitted into child welfare services. (Hovland & Hean, 2021).

While some of the existing research on the sibling relationship focuses on siblings within unique situations such as divorce, foster care, or the relationship between two half-

siblings, almost all conclude with the statement that the sibling relationship serves as a social foundation for which children build and grow their social skills. The research discussed previously in this section primarily focuses on the sibling relationship with participants in childhood and adolescence. Continued research chose to focus on how these relationships mature over time how the sibling relationship can impact a person's development and the impact it has on later life, such as emerging and later adulthood.

Developmental Impact of the Sibling Relationship on Later Life

Research on sibling relationships is limited, and the research that does exist primarily focuses on adolescent or young adult sibling relationships. Researchers recognize that adolescence is the "tipping point" for sibling relationships and this time can often "set the stage" for how healthy and engaged, or distant and uninvolved, a relationship with siblings can become in adulthood (Campione-Barr & Killoren, 2019).

In a study seeking to look beyond adolescence and young adulthood, researchers seek to provide more information about sibling relationships in later adulthood, investigate predictors of differences in sibling relationship quality, and examine associations among sibling relationship quality, loneliness, and well-being in later adulthood. After analysis of the data from 608 older adults, results showed that the older adults reported higher levels of sibling warmth and low levels of sibling conflict and parental favoritism. Additionally, sister-sister pairs had a warmer relationship than brother-brother or mixed-gendered pairs. Sibling conflict and parental favoritism were associated with depression, loneliness, hostility, and anxiety. Sibling warmth was negatively associated with loneliness and loneliness mediated with the association between sibling relationship quality and well-being. The results from this study further

emphasize the importance of sibling relationships in older adulthood. (Socker et al., 2020).

One of the recognized difficulties of the sibling relationship is the difference in proximity. It is believed that sibling relationship quality tends to decline in emerging adulthood because this is when people tend to move out of the home and into their own home, off to college, or in with roommates. In a qualitative study examining the sibling relationship dynamics, communication strategies, and the implications of sibling's proximity with one another in emerging adulthood, Hamwey, et al. (2019) found that siblings remained an essential fixture in the lives of emerging adults, despite physical proximity to one another and less frequent communication. Participants sighted a greater depth of conversations despite less frequent conversations. Participants also noted that they felt their relationship with their siblings felt like they "picked up where they had left off" and they feel "more like equals and have a better understanding of one another." (Hamwey et al., 2019, p.2487). The findings from this particular study appear to dispel this belief and suggest that sibling relationship quality is more profound than just physical proximity. This idea then leads to the theory of attachment.

Prior research suggests that having a higher level of attachment with parents creates positive outcomes of psychological and subjective well-being for children later in life. Furthermore, the sibling relationship may also have very beneficial influences on psychological and personal well-being. Shepherd et al., (2021) conducted a mixed methods study exploring the potential moderating role of sibling attachment and the association between parental attachment and later life well-being. Significant relationships were found for attachment and well-being for maternal and sibling

attachments, but not necessarily for paternal attachments. Interestingly, sibling attachment was a greater predictor of later-life well-being as opposed to paternal attachment. This study emphasizes the importance of early life attachments on future well-being, and further supports the idea that attachment figures during childhood shape a child's self-confidence and view of self, as well as their view of others within the larger environmental context (Shepherd et al., 2021). This idea presented by Shepherd, et al. (2021) then leads to the development of empathy.

Nahide Gungordu and Maria Hernandez-Reif continued this study with a focus on the empathy development of women entering adulthood. The results of this continued study garnered similar results, concluding that affective empathy and cognitive empathy are linked to sibling relationship quality and that significant issues within the family system can play a critical role in sibling closeness and sibling empathy (Gungordu et al., 2022).

In a previous study, examining the association between the quality of sibling relationships in young adulthood and their cognitive and affective empathy process, researchers found that there was a strong positive relationship between affective empathy and sibling relationship quality. This finding suggests that siblings may play a crucial role in shaping each other’s empathy development. Overall, this study suggests that positive sibling relationship quality is linked to positive empathy scores, furthermore, supporting a positive view of others (Gungordu & Hernandez-Reif, 2020).

Another area of curiosity in siblings' research is the idea that young adults' sibling relationships and attachment styles may predict young adults' romantic relationship quality. In a study examining the possible associations between attitudes toward sibling

relationships, adult attachment styles, and romantic relationship qualities, researchers had three hypotheses. First, researchers believed that the perceived relationship between siblings was positively correlated with adult attachment styles and romantic relationship quality; second, that the frequent use of specific behaviors that are associated with adult attachment styles was negatively correlated with romantic relationship quality; and third, that attitudes towards the sibling relationship and adult attachment styles may predict romantic relationship quality. Ultimately, the results of the study only supported some of the hypotheses. Researchers found that positive attitudes toward sibling relationships and a decreased use of expected behaviors associated with avoidant attachment style influenced a higher romantic relationship quality (Sommantico et al. 2019).

Research suggests that the sibling relationship remains a stable relationship throughout life, despite life changes in stressors. In a study examining the changes in individual sibling relationships in response to life events, researchers found union formation and transitioning from part-time to full-time work was associated with a decrease in visits, becoming a parent increased support from siblings, moving farther apart can lower the number of visits and exchanges of support, however, there was no significant effect on overall sibling relationship quality as a result of life events (Spitze & Trent, 2018).

Biblical Foundations of the Study

Scriptural references to Marriage, Family, and Divorce

The main focus of this study is exploring the impact of parental divorce on the lives of the children, and how the sibling relationship may act as a buffer for some of the negative symptoms of parental divorce. Before discussing the biblical foundations of this

study, it is helpful to consider the role of the parents in the lives of their children and the family unit as a whole. Proverbs 22:6 states, "Train up a child in the way he should go, even when he is old, he will not depart from it." This verse emphasizes the role of parents and how their teaching and parental guidance form the moral and ethical development of their children throughout their lives. Furthermore, Psalm 127: 3-5 reads, "Behold, children are a heritage from the Lord, the fruit of the womb a reward. Like arrows in the hand of a warrior are the children of one's youth. Blessed is the man who fills his quiver with them! He shall not be put to shame when he speaks with his enemies in the gate." The Bible views children as the most precious gift from the Lord, the joining of two to become one flesh. The Bible glorifies the nuclear family unit as God had originally intended it to be, however, the Bible does not include much related to the broken family unit.

While the bible fails to specifically discuss a broken family unit, besides the mention of the "fatherless," Scripture stresses the importance of marriage and the unity of a married couple. Hebrews 13:4 remarks, "Let marriage be held in honor among all, and let the marriage bed be undefiled, for God will judge the sexually immoral and adulterous." Matthew 19:9 further explains "Whoever divorces his wife, except for sexual immorality, and marries another, commits adultery." From a biblical perspective, it appears that divorced and remarried individuals are less than favored and looked down upon. While this statement could be said in some social groups, society today has become more accepting of divorced couples.

Biblical References to the Sibling Relationship

Examples of the sibling relationship in the bible have not always been positive. We first hear of the sons of Adam and Eve in Genesis 4. The story of Cain and Abel depicts jealousy and remorse. We then hear of Esau and Jacob in Genesis 25 and 33. This story outlines the origin of sibling rivalry and competition. These examples support the longstanding narrative that siblings should be rivals and may not make the best companions to endure hard times. However, the Bible also speaks fondly of "brothers and sisters in Christ." This imagery helps Christians to view Christianity as a family, therefore speaking highly of this bond between brother and sister.

Popular Christian publication, DaySpring, emphasizes the importance of gathering together as a family in Christ, reminding, in Matthew 18:20, "For where two or three are gathered in my name, there am I among them". DaySpring goes on to outline the role of brothers and sisters in Christ quite well. The first role is to "meet with your brothers and sisters in Christ regularly," as shared in Hebrews 10:24-25, "and let us consider how to stir up one another to love and good works, not neglecting to meet together, as is the habit of some, but encouraging one another, and all the more as you see the Day drawing near". This scripture emphasizes the importance of encouragement and empowerment within the relationship (DaySpring, 2022).

The second role is to trust in your brothers and sisters and "tell them the truth." Matthew 18:15 explains, "If your brother sins against you, go, and tell him his fault, between you and him alone. If he listens to you, you have gained your brother." This scripture speaks to the trustworthy and intimate relationship between siblings. If one has wronged the other, then they should both respect one another enough to handle this

situation in private instead of airing their grievances to those outside the family or the issue. (DaySpring, 2022).

This idea is also tied to the third encouragement, which is to "be compassionate." Using 1 Corinthians 12:26, "If one member suffers, all suffer together; if one member is honored, all rejoice together", DaySpring reminds us that we are to be compassionate and loving towards those in our "family" This could mean our family in Christ or our earthly family. As a family, we should be there to support, love, and encourage as we would want them to do for us. (DaySpring, 2022).

Fourth, we are called to "forgive them." Leviticus 19:18 states, "You shall not take vengeance or bear a grudge against the sons of your own people. But you shall love your neighbor as yourself; I am the Lord." This verse has some strong and powerful words, but it only emphasizes the importance of what God is telling us at this moment, that we should strive to forgive as He has forgiven us. (DaySpring, 2022).

The fifth role of brothers and sisters in Christ, presented by DaySpring, is to "seek good for them." 1 Thessalonians 5:15 reads, "See that no one repays anyone evil for evil. But always seeks to do good to one another and everyone." It is the command of the Lord to seek out the good in and for all people regardless of their wrongdoings towards us. This idea alone may be problematic when considering adverse events such as familial separation or divorce, however there too, the command of the Lord reigns true. (DaySpring, 2022).

Finally, the sixth encouragement is to "pray for them." As mentioned in James 5:16, "Therefore confess your sins to one another and pray for one another, that you may be healed. The prayer of a righteous person has great power as it is working." This verse

emphasizes the power of prayer and the good works that it can do in the lives of those praying and being prayed for. God calls us to pray for those who are close, and those who may not be as close, so that they too may reap the rewards of His love. (DaySpring, 2022).

These 6 encouragements or reminders provided by DaySpring allow us to conceptualize the teachings and commands of the Lord, outlined throughout scripture, about the unique relationship between brothers and sisters. As mentioned previously, the bible scarcely mentions the sibling relationship specifically, outside of negative sibling relationships, however, he speaks and commands heavily on the role of brothers and sisters in Christ and their obligation to one another.

Summary

Through a thorough review of the present literature on adverse childhood experiences (ACEs), divorce trends in the US, the impact of parental separation on the well-being of children, and the impact of sibling relationships on the well-being of sibling pairs, the research found a few common themes. Literature on divorce rates in the US shows that the divorce rate appears to have leveled out in recent years, however, some scholars are attributing this decline to a decrease in overall marriages among young people today. Prior literature and research on the impact of parental divorce or separation show significant negative implications on the children's emotional and behavioral well-being, physical health, social well-being, and academic functioning. Similarly, the previous literature and research on the influence of sibling relationships show significant positive implications on the behavioral and emotional well-being, physical health, and social well-being of their siblings. Very little research exists to explore or examine the

intersection of parental divorce and the sibling relationship of their children, as well as, how the positive implications of the sibling relationship may help mitigate the negative implications of parental divorce in children with a sibling.

CHAPTER 3: RESEARCH METHOD

Overview

The purpose of this quantitative study was to explore the relationship between perceived sibling relationship quality and parental divorce conflict, as well as sibling relationship quality and mental health. The current literature rarely spoke to the intersection between parental divorce and sibling relationships. The literature supported the idea that there are harmful social, developmental, health, and academic implications of parental divorce, as well as positive social, health, and developmental implications of the sibling relationship. Correlational research was conducted to measure the relationship between post-divorce parental conflict and perceived sibling relationship quality, as well as perceived sibling relationship quality and mental health outcomes of participants.

In this chapter, the research questions, and hypotheses for the quantitative study were stated. Additionally, a detailed description of the study design was discussed. This section included a description of the participants, including inclusion and exclusion criteria. Study procedures were examined, and a detailed data analysis was described. Finally, the study's delimitations, assumptions, and limitations were discussed.

Research Questions and Hypotheses

Research Questions

RQ1: What is the relationship between post-divorce parental conflict and perceived sibling relationship quality?

RQ 2: What is the relationship between positive sibling relationships during parental divorce and mental health in adulthood?

Hypotheses

The research aims to investigate whether there is a relationship between post-divorce parental conflict and perceived sibling relationship quality. The study also investigated the correlation between positive perceived sibling relationship quality during parental divorce and mental health in adulthood.

$H1_0$: There will be no relationship between a high level of post-divorce parental conflict and positive perceived sibling relationship quality.

$H1_a$: There is a positive correlation between a high level of post-divorce parental conflict and positive perceived sibling relationship quality.

$H2_0$: There is no relationship between positive perceived sibling relationships during parental divorce and high levels of psychological distress as indicated by the score on the General Health Questionnaire.

$H2_a$: There is a negative correlation between positive perceived sibling relationships during parental divorce and high levels of psychological distress as indicated by the score on the General Health Questionnaire.

Research Design

The study was a quantitative, correlational research design. This type of research has been discussed as a more formal, objective, and rigorous approach to generating and refining knowledge in one area (Mohajan, 2020). This research design has been long cited as the preferred method in analyzing data as it conducts the data inquiry in an objective and unbiased way by explaining phenomena by utilizing unchanging numerical data to produce logical and objective results (Mohajan, 2020). The quantitative research design in this study allowed participants to provide anonymous responses to the data

collection tools. In this study, post-divorce parental conflict, perceived sibling relationship quality, and mental health were the variables of focus.

Correlational research was utilized for this study as it allows the researcher to investigate the relationship between the participant's sibling relationship score as measured by the Lifespan Sibling Relationship Scale (LSRS) and the score produced by the Post-Divorce Parental Conflict Scale (PPCS), additionally, the participant's sibling relationship score as measured by the Lifespan Sibling Relationship Scale (LSRS) and their score on the General Health Questionnaire (GHQ-12) as it prevents manipulation by the researcher.

Participants

Data was collected by a random sampling of participants who have at least one sibling with whom they lived and experienced parental divorce or separation. Based on the power analysis with a medium effect size and an alpha of .05, only 62 participants are needed. To increase the study's effectiveness, a convenience sample of 64 participants was used. Participants included individuals of any race, gender, age (18 years old and older), and economic status. Participants who had more than one sibling were asked to choose one sibling to report on throughout the study through a series of self-report measures. Inclusion criteria included individuals who must be 18 years of age or older, have experienced parental divorce in childhood with a sibling, and this sibling is still living.

Advertisement and Recruitment. Potential participants were recruited utilizing the Recruitment Flyer provided in Appendix B. After approval was granted, this recruitment flyer was distributed by the Chair and Professors of the Department of Psychology at

Liberty University. The recruitment flyer was also distributed on the researcher's personal social media accounts to reach a demographic that may not be represented in the sample produced by recruitment within the university system. Additional copies of the Recruitment Flyer were distributed in public places such as public bulletin boards at coffee shops, gas stations, and libraries located suburban neighborhoods within the greater Fond du Lac, Wisconsin area. Participation in the study was entirely anonymous, no names or identifying information was collected, therefore removing any conflict of interest. Participants were directed to the recruitment flyer which allows them to scan a QR code or input the link for participation. The flyer included questions such as, "Are you 18 years of age or older?", "Did you and a sibling experience parental divorce in childhood?", "Is this sibling still living?", "Did your parents engage in a marked amount of conflict following their divorce?", "If you answered yes to each of the above questions, you may be eligible to participate in a research study". Participants were directed to the QR code that allowed them to complete the self-report survey, which included Likert-style questions.

Study Procedures

Following a thorough review of the current literature on both parental divorce and the sibling relationship respectively, research questions and hypotheses were developed to explore topics related to gaps in the current literature. Participants were recruited via the disbursement of recruitment flyers that were distributed via email, posted flyers, and social media. The recruitment flyer briefly described the purpose of the study, inclusion criteria, requirements of the study, and contact information for the researcher. The recruitment flyer also included a QR code to access the anonymous survey that was

created and generated through Qualtrics and did not collect any personal or identifying information about the participants. The recruitment flyer is included in Appendix B: Recruitment Flyer.

Participants were asked to use the anonymous link created and generated through Qualtrics to complete the survey. The survey included the Consent Form (Appendix C), the Demographics Questionnaire (Appendix D), The Post-Divorce Parental Conflict Scale (PPCS) (Appendix E), the Lifespan Sibling Relationship Scale (LSRS) (Appendix F), and the General Health Questionnaire (GHQ-12) (Appendix G).

Approval was requested and received from Liberty University's Institutional Review Board (IRB) before conducting this study. Electronic communication via email was sent to the Chair of the Department of Psychology and professors to receive their permission to recruit their undergraduate and graduate students. After approval was granted, consenting participants followed the instructions provided using the QR code provided on the recruitment flyer to complete the survey which includes the Demographics Form, PPCS, LSRS, and GHQ-12.

Instrumentation and Measurement

Demographics Questionnaire

The demographics form was used to collect data to ensure that the participants met the inclusion criteria necessary for the study. This form was created for this study by

the researcher. This form included eight questions related to participant gender, age, race, number of siblings, sibling age, and presence of parental divorce and conflict.

Post-divorce Parental Conflict Scale (PPCS)

This is a 78-item self-report questionnaire that asked participants to report the rate of occurrence of certain situations based on their mother and father's behavior towards them at two intervals of time, once during the first year after the divorce, and then again within the last 12 months. Participants are asked to answer based on a Likert scale from 1-5. Participants are asked to respond 1 – The event never happened (Never), 2 – This happened at least once during the year (Seldom), 3 – This happened at least once a month (Occasionally), 4 – This happened at least once a week (Frequently), or 5 – This happened every day (Constantly) across two time periods. For this study, the only period assessed was the first year after the parental divorce occurred. Higher scores will represent high levels of post-divorce parental conflict. The Post-Divorce Parental Conflict Scale has been shown to have strong internal consistency (.80-.93) (Sonneblick & Schwarz, 1992).

Lifespan Sibling Relationship Scale (LSRS)

This is a 48-item self-report questionnaire that asked participants to respond to each question on a Likert scale from 1-5. This quantitative questionnaire focused on a subjective report of the sibling relationship throughout the lifespan, including childhood and adulthood (ex. "I am proud of my sibling," "My sibling is very important in my life," "My Sibling looked after me (OR I looked after my sibling) when we were children"). This measure consisted of six subscales including adult affect, adult behavior, adult cognitions, child affect, child behavior, and child cognitions. Participants were asked to

complete the entirety of the questionnaire. Participant responses were scored on a 5-point Likert scale. Participants are asked to respond to each question with the following options, 1- Strongly Disagree, 2- Disagree, 3- Neither Agree nor Disagree, 4- Agree, and 5- Strongly Agree. Higher scores represent a higher perceived sibling relationship quality. The LSRS has been shown to have a high internal consistency (.83 to .91) and test-retest reliability (r=.91) (Riggio, 2000).

General Health Questionnaire (GHQ-12)

This is a 12-item self-report questionnaire that asked participants to report their general reactions to certain stimuli, which revealed their feelings about stressors that may be present in their lives. This assessment tool consisted of six negatively worded items such as "Have you recently been losing confidence in yourself?", and six positively worded items such as "Have you recently felt that you are playing a useful part in things?". Participants' responses were scored on a 4-point Likert scale from 0 to 3. Participants are asked to respond 0 for "Not at all", 1 for "Seldom", 2 for "Usual", and 3 for "More than usual", for all negatively worded items. Positively worded items were reverse scored. A higher score indicated a higher level of psychological distress and mental health symptoms. The GHQ-12 has been shown to have strong reliability and correlations as Cronbach's alpha was .844) (Banks et al., 1980; Liang et al., 2016).

Operationalization of Variables

Perceived Sibling Relationship Quality – this variable, Perceived Sibling Relationship Quality, is a ratio variable and was measured by total score on the Lifespan Sibling

Relationship Scale (LSRS). A ratio value represents each participant's total score on the LSRS. (Riggio, 2000).

Parental Divorce Conflict– this variable, Parental Divorce Conflict, is a ratio variable and was measured by total score on the Post-Divorce Conflict Scale (PPCS). A ratio value represents each participant's total score on the PPCS. (Sonneblick & Schwarz, 1992).

Mental Health – this variable, Mental Health, is a ratio variable that was measured by the total score on the General Health Questionnaire (GHQ-12). A ratio value represents each participant's total score on the GHQ-12. (Banks et al., 1980; Liang et al., 2016).

Data Analysis

This study used Pearson's r Correlation to analyze the data. This method allowed for analysis of the relationship between parental divorce conflict and mental health. Pearson's r Correlation was also used to measure the relationship between parental divorce conflict and the quality of the sibling relationship. Data was collected on the variables of perceived sibling relationship quality, post-divorce parental conflict, and mental health using the PPCS, LSRS, and GHQ-12. Data collected from each of the variables was assigned ratio values for statistical testing purposes. Following data collection, the data was manually entered into a spreadsheet. Any incomplete surveys were removed from the data set. Responses were imported into SPSS 29.0 for analysis. To maintain confidentiality, participants were not asked to provide a name. The informed consent form was shown and acknowledged by the participant prior to their responses to survey questions. The entirety of the survey was separated by survey measure. A Pearson's r statistical test was conducted to measure the correlation between perceived

sibling relationship quality and parental divorce conflict, as well as the correlation between perceived sibling relationship quality during parental divorce and mental health symptoms in adulthood. The statistical test was directional due to the hypothesis that a positive sibling relationship quality was positively associated with a higher post-divorce parental conflict score, as well as the hypothesis that a positive sibling relationship during parental divorce will lead to lower mental health symptoms. The purpose of the research study justified using Pearson's r test to determine trends and patterns in the data.

Delimitations, Assumptions, and Limitations

Delimitations. Delimitations were noted for this study as the researcher established the following criteria: (a) Participants will choose one sibling to report on throughout the duration of the study. (b) Participants will have lived through or experienced parental divorce with their siblings. (c) The parental divorce occurred when the participant and their sibling were children.

Assumptions. Assumptions present in the study include the assumption that the participant and their sibling have frequent to moderately frequent contact with their sibling, enough to honestly report on the current status of their relationship with their sibling. Another assumption present is that the participant views parental divorce as triggering and/or traumatic, having a negative impact on their childhood and development into adulthood. A third assumption is that the parental unit is a male-female pair.

Limitations. Limitations in this study include difficulty in recruiting and engaging participants to begin and complete the entirety of the study. This could be due to several factors previously discussed including poor recruitment measures, the inability to incentivize participants, and the length of the study measures. Another limitation that

may have impacted this study is the difficulty of controlling for the diversity of participants. Because of the participation criteria, and the nature of recruitment, it was difficult to control for age, gender, or race. Because of this, it may create difficulty in generalizing findings.

Summary

In conclusion, Chapter 3 discussed the study's research questions, hypothesis, participants, and detailed data analysis. The research design was discussed and highlights how the quantitative correlational study allows for objective data collection. The quantitative study utilized deductive reasoning through hypothesis, numerical data collection, data analysis to test hypotheses, and anonymous surveys and questionnaires to obtain necessary data. The research study examined the relationship between perceived sibling relationship quality and post-divorce parental conflict, as well as the sibling relationship quality during parental divorce and mental health symptoms in adulthood.

The study procedures described how the researcher recruited a convenience sample of 64 participants to participate throughout the duration of the study. This chapter also included information on instrumentation and measurement as surveys and questionaries to be used include the demographic questionnaire, the PPCS, LSRS, and GHQ-12. Finally, Chapter 3 examined the research variables and discussed the study's delimitations, assumptions, and limitations. After all data analyses were conducted, Chapter 4 will present and describe the results found.

CHAPTER 4: RESULTS

Overview

The purpose of the quantitative correlational study was to examine the relationship between post-divorce parental conflict and perceived sibling relationship quality for siblings who experienced the impact of parental divorce and to examine the impact of a positive sibling relationship during parental divorce on the mental health of children of divorced parents in adulthood. The study aimed to confirm or deny the belief that children who experienced parental divorce in childhood had a significant positive relationship with their sibling(s) during childhood and adulthood, in addition to confirming or denying the belief that these children experienced marked mental health symptoms as adults. The quantitative correlational study recruited participants through word of mouth and distributed the recruitment flyer (Appendix B) via email, social media platforms, and posting in public places. The recruitment flyer included a QR code to access an anonymous survey link created and generated through Qualtrics. Participants completed the survey by clicking the link in the email or scanning the QR code provided in the recruitment material. The completed survey data was analyzed using SPSS (version 29). A Pearson's r statistical test was conducted to measure the correlation between two data sets. Chapter 4 will overview the study's descriptive results, findings, relevant statistics, tables, and statistical comparisons.

Descriptive Results

The study generated by Qualtrics was anonymous and did not collect identifiable data about any of the 114 overall participants. The participants were recruited via a recruitment flyer (Appendix B), social media posts (Appendix J), an email out to the

Psychology Department at Liberty University (Appendix A), and word of mouth. Only 64 of the 114 total respondents met the inclusion criteria of at least 18 years of age, had a sibling 18 years of age or older, had experienced parental divorce in childhood with a sibling, and this sibling is still living. The study obtained 64 viable responses from participants. All participants completed each of the survey measures, including the Demographics Questionnaire (Appendix D), The Post-Divorce Parental Conflict Scale (PPCS) (Appendix E), the Lifespan Sibling Relationship Scale (LSRS) (Appendix F), and the General Health Questionnaire (GHQ-12) (Appendix G).

A total of 114 responses were recorded in the Qualtircs survey from March 14, 2023, to August 13, 2023. Of the 114 recorded responses, 64 surveys were completed in full and were included in the final sample for data analysis. Nineteen of the total surveys could not be included due to failure to meet inclusion criteria (19 surveys), and thirty-one of the total surveys due to incompletion (31 surveys).

The study utilized an online survey format through the Qualtrics program to collect data from the Demographics Questionnaire (Appendix D), The Post-Divorce Parental Conflict Scale (PPCS) (Appendix E), the Lifespan Sibling Relationship Scale (LSRS) (Appendix F), and the General Health Questionnaire (GHQ-12) (Appendix G), and for the participant to provide consent. The Demographics Questionnaire was utilized to gauge whether the person met inclusion criteria such as age and parental divorce status, the measure consisted of 8 multiple-choice questions. This measure collected participant data such as gender, age, and number of siblings. The majority of participants self-identified in the 18-29 age group (20), while the minority of participants self-identified in the 60 or older age group (2). Sixteen (16) participants self-identified as

"male" while forty-eight (48) participants self-identified as "female". It is important to note that participants had the option to select "male", "female", "non-binary/ third gender", and "prefer not to say". The majority of participants identified as "White/ Caucasian" (54). Table 1 provides details on the number of participants that were completed by each race/ethnicity.

Table 1

Participant Race/Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African American/ Black	2	3.1	3.1	3.1
	Hispanic/ Latino	3	4.7	4.7	7.8
	Native American or Alaskan Native	2	3.1	3.1	10.9
	White/ Caucasian	54	84.4	84.4	95.3
	More than one race/ethnicity	3	4.7	4.7	100.0
	Total	64	100.0	100.0	

The Post-Divorce Parental Conflict Scale collected information about the participant's perceived level of parental conflict one year after the parental divorce. This measure consisted of 78 Likert-style questions in which participants answered how frequently the event occurred between "The event never happened (Never)" and "This happened every day (Constantly)". The participant's responses were scored and added to create a total score. A higher Post-Divorce Parental Conflict score indicated a higher level of parental conflict one year after the initial divorce. Possible scores range from 0 to 390. In the current study, the lowest reported score on the PPCS was 92, and the highest reported score on the PPCS was 303. The mean post-divorce parental conflict score was

169.83, with a standard deviation of 41.91. Post-divorce parental conflict scores also resulted in a median score of 175, with a mode of 120.

The Lifespan Sibling Relationship Scale collected information about the participant's perceived satisfaction with their sibling relationship. This measure consisted of 48 Likert-style questions in which participants answered how they agreed or disagreed with the statements. Choices ranged from "Strongly Disagree" to "Strongly Agree". The participant's responses were scored and added to create a total score. A higher Lifespan Sibling Relationship score indicated a higher level of satisfaction with their sibling relationship. Possible scores range from 0 to 240. In the current study, the lowest reported score on the LSRS was 70, and the highest reported score on the LSRS was 197. The mean sibling relationship score was 126.02, with a standard deviation of 29.42. Sibling relationship scores also resulted in a median score of 122, with a mode of 98.

The General Health Questionnaire (GHQ-12) collected information about the participant's perceived level of overall health. This measure consisted of 12 Likert-style questions in which participants answered how frequently they experienced the statement. Choices ranged from "More than usual" to "Not at all". The participant's responses were scored and added to create a total score. A higher General Health score indicated a lower level of overall health. Possible scores range from 0 to 36. A score of 11-12 is considered typical, scores from 15-19 suggest a moderate amount of distress, and a score of 20 or more suggests that there is severe distress and concern (Khatib, 2021). In the current study, the lowest reported score on the GHQ-12 was 22, and the highest reported score on the GHQ-12 was 33. The lowest and highest scores fall within the "severe distress and concern" range. The mean General Health score was 28.03, with a standard deviation of

2.91. Sibling relationship scores also resulted in a median score of 28, with a mode of 26. Table 2 summarizes descriptive statistics for all instruments used.

Table 2

Descriptive Statistics for all Instruments

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Total_GHQ	64	28.0313	2.91122	-.004	.299	-.759	.590
Total_PPCS	64	169.8281	41.91395	.339	.299	.402	.590
Total_LSRS	64	126.0156	29.42329	.414	.299	-.457	.590
Valid N (listwise)	64						

Study Findings

The study aimed to answer two research questions: RQ1: "What is the relationship between post-divorce parental conflict and perceived sibling relationship quality?", and "RQ2: What is the relationship between positive sibling relationships during parental divorce and mental health in adulthood?". A Pearson's r correlation test examined the statistical relationship between the total post-divorce parental conflict score and the total perceived sibling relationship quality score. A second Pearson's r correlation test examined the statistical relationship between the total perceived sibling relationship score and mental health symptoms in adulthood, as measured by the total score using the General Health Questionnaire (GHQ-12). The purpose of the research study justified using a Pearson's r test to determine the relationship between the post-divorce parental

conflict and perceived sibling relationship quality, as well as perceived sibling relationship quality and mental health symptoms.

Pearson's r Normality and Assumptions

A Pearson's r statistical test was chosen for this study based on the following assumptions: each variable was an interval or ratio variable, there was a linear relationship between the two variables, the variables were normally distributed, and there were no outliers in the data set. The criteria for a Pearson's r statistical test are that it uses interval or ratio data, and it is free of outlier data, due to the tendency of outlier data to skew the results. It is important to note that Pearson's r correlational test does not assume normality.

Hypotheses

$H1_0$: There will be no relationship between a high level of post-divorce parental conflict and positive perceived sibling relationship quality.

$H1_a$: There is a positive correlation between a high level of post-divorce parental conflict and positive perceived sibling relationship quality.

$H2_0$: There is no relationship between positive perceived sibling relationships during parental divorce and high levels of psychological distress, as indicated by the score on the General Health Questionnaire.

$H2_a$: There is a negative correlation between positive perceived sibling relationships during parental divorce and high levels of psychological distress, as indicated by the score on the General Health Questionnaire.

Results

In the research study, the first hypothesis stated that a positive correlation between a high level of post-divorce parental conflict and a positive perceived sibling relationship quality would be found. Using Pearson's r relationship statistical test, Table 3 demonstrates that there was not a significant relationship between the total post-divorce parental conflict score and the perceived sibling relationship, $r(64) = .208$, $p=.099$ (two-tailed). Therefore, we fail to reject the null hypothesis. This result indicates that there was little significance between a high level of post-divorce parental conflict and a positive perceived sibling relationship quality.

Table 3

Correlations: PPCS and LSRS

		Total PPCS Score	Total LSRS Score
Total PPCS Score	Pearson Correlation	1	.208
	Sig. (2-tailed)		.099
	N	64	64
Total LSRS Score	Pearson Correlation	.208	1
	Sig. (2-tailed)	.099	
	N	64	64

The second hypothesis in the research study is that there is a negative correlation between positive perceived sibling relationships during parental divorce and high levels of psychological distress, as indicated by the score on the General Health Questionnaire. Using the Pearson's r relationship statistical test, Table 4 demonstrated a non-significant negative correlation, $r(64) = -.264$, $p=.035$ (two-tailed). This finding suggests there was little significance between positive perceived sibling relationships during parental divorce and high levels of psychological distress, as indicated by the score on the General Health Questionnaire. Therefore, we fail to reject the null hypothesis.

Table 4

Correlations: LSRS and GHQ-12

		Total LSRS Score	Total GHQ-12 Score
Total LSRS Score	Pearson Correlation	1	-.264*
	Sig. (2-tailed)		.035
	N	64	64
Total GHQ Score	Pearson Correlation	-.264*	1
	Sig. (2-tailed)	.035	
	N	64	64

*. Correlation is significant at the 0.05 level (2-tailed).

The correlational relationship between the participant's total score on the LSRS and the total score on the PPCS is represented in Figure 1. Additionally, the correlational relationship between the participant's total score on the GHQ-12 and the total score on the LSRS is represented in Figure 2.

Figure 1

Total score on LSRS and PPCS

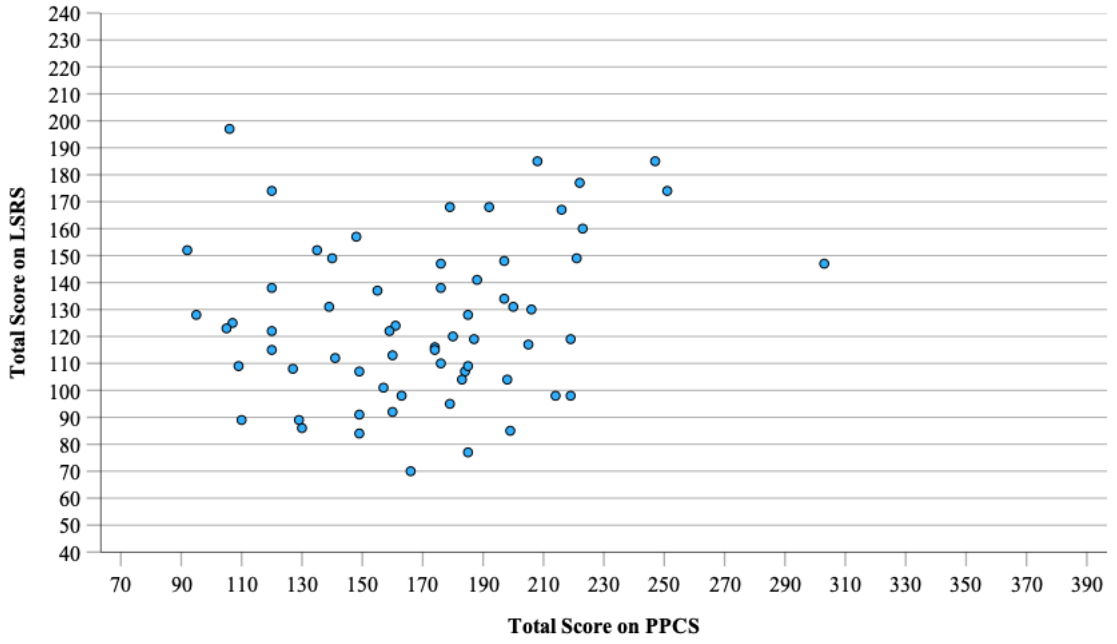
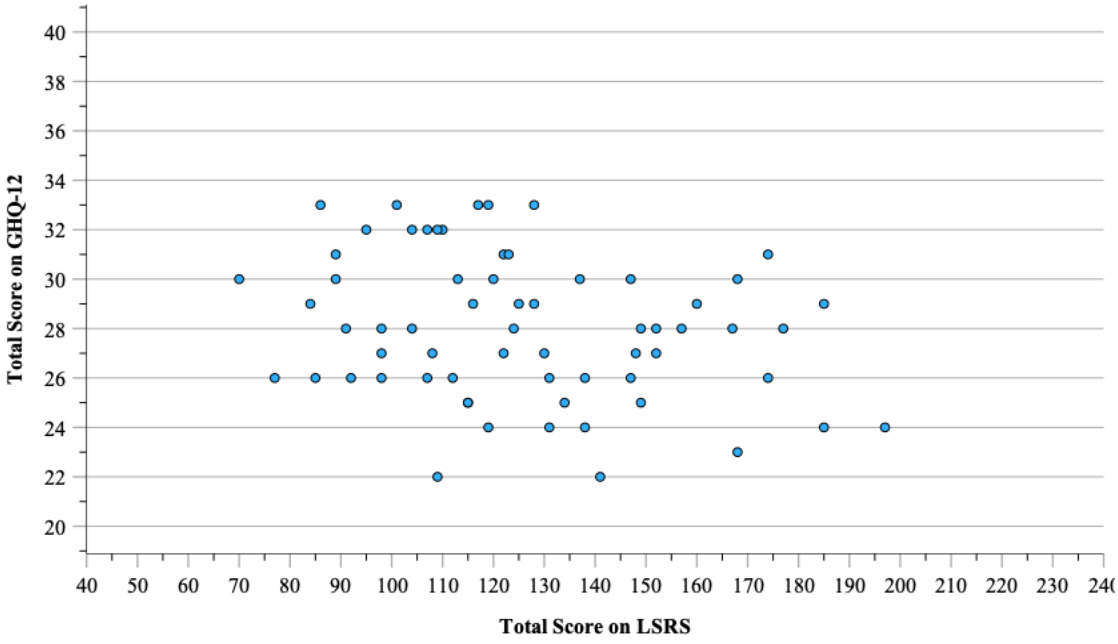


Figure 2

Total score on the GHQ-12 and LSRS



Summary

Sixty-four participants, recruited through word of mouth, social media posts, an email to the psychology department at Liberty University, and recruitment flyers, completed an anonymous Qualtrics study via an anonymous link or QR code. The participants were asked to complete a series of measures that collected data on post-divorce parental conflict, perceived sibling relationship quality in childhood and adulthood, and overall mental health symptoms as measured by a general health questionnaire. The study aimed to answer two research questions, RQ1: "What is the relationship between post-divorce parental conflict and perceived sibling relationship quality?", and RQ2: "What is the relationship between positive sibling relationships during parental divorce and mental health in adulthood?". A Pearson's r statistical test was conducted for both questions to measure the correlation between the total score on

the Post-Divorce Parental Conflict Scale (PPCS) and the total score on the Lifespan Sibling Relationship Scale (LSRS). A second Pearson's r correlation test examined the statistical relationship between the total score on the Lifespan Sibling Relationship Scale (LSRS) and the total score on the General Health Questionnaire (GHQ-12).

Pearson's r statistical test indicated that there was not a statistically significant relationship between post-divorce parental conflict and a high perceived sibling relationship quality. The null hypothesis failed to be rejected due to the lack of statistical significance. The second Pearson's r test indicated that there was not a statistically significant relationship between sibling relationship quality, as indicated by the LSRS, and overall mental health symptoms, as indicated by the GHQ-12. Therefore, the null hypotheses failed to be rejected.

Chapter 5 will revisit the study's purpose, summarize key findings, and discuss what these results mean and how they can be used for future research and literature. Chapter 5 will also discuss how the study contributes to previously presented theories, connects with the biblical foundation of the study, and the key takeaways of this study. Finally, this chapter will discuss the study's implications, limitations, and recommendations for future research.

CHAPTER 5: DISCUSSION

Overview

The purpose of this quantitative correlational study was to examine the relationship between post-divorce parental conflict and perceived sibling relationship quality for siblings who experienced the impact of parental divorce and to examine the impact of a positive sibling relationship during parental divorce on the mental health of children of divorced parents in adulthood. The study aimed to confirm or deny the belief that children who experienced parental divorce in childhood had a significant positive relationship with their sibling(s) during childhood and adulthood, in addition to confirming or denying the belief that these children experienced marked mental health symptoms as adults. Chapter 5 will briefly discuss and summarize the key findings, their meaning, and how they compare to the research literature. Chapter 5 will also discuss how the study contributes to the undersetting of the previously discussed theories and biblical foundation. Finally, Chapter 5 will discuss the study's implications, limitations, and future research recommendations.

Summary of Findings

In the research study, the first null hypothesis stated that there is a positive correlation between a high level of post-divorce parental conflict and a positive perceived sibling relationship quality. Using Pearson's r correlational statistical test, Table 3 demonstrates that the data collected does not support a statistically significant result. The second null hypothesis stated that there is a negative correlation between positive perceived sibling relationships during parental divorce and high levels of psychological

distress, as indicated by the score on the General Health Questionnaire. Using Pearson's r correlational statistical test, Table 4 also demonstrates a non-significant result.

Discussion of Findings

The objective of the study was to examine the relationship between parental divorce conflict and perceived sibling relationship quality, as well as perceived sibling relationship quality during parental divorce and mental health symptoms. This study had two goals. The first goal was to test whether or not the level of post-divorce parental conflict, as measured by the Post-Divorce Parental Conflict Scale (PPCS), had a relational connection to perceived sibling relationship quality, as measured by the Lifespan Sibling Relationship Scale (LSRS). The second goal was to explore whether a higher perceived sibling relationship score would correlate with any mental health symptoms, as measured by the General Health Questionnaire (GHQ-12). A Pearson's r statistical test revealed that there was not a significant relationship between the participant's total score on the PPCS and then LSRS. Descriptive statistics of this test are represented in Table 3, and visually in Figure 1 above.

Similarly, a second Pearson's r correlational test revealed that there was not a significant relationship between the participant's total score on the LSRS and the GHQ-12. Descriptive statistics of this test are represented in Table 4, and visually in Figure 2 above. These results mean that there was not enough statistical data to support the original hypothesis that there is no relationship between a high level of post-divorce parental conflict and positive perceived sibling relationship quality; and that there is no relationship between positive perceived sibling relationships during parental divorce and high levels of psychological distress as indicated by the score on the General Health

Questionnaire. Because this study appears to be the first of its kind, the results of the statistical test are consistent with the inconsistency or lack of literature discussed in the previous literature review.

Despite the lack of specific literature, there are key themes in the current research on divorce and the sibling relationship that should be considered. Common trends in family research focus on the prevalence of divorce. Previous statistics suggest that about 50% of marriages end in divorce (Miller, 2017), while more recent statistics suggest that the divorce rate is not as prevalent (Miller, 2017). Previous research struggles to agree on influences that justify the rise or fall in the divorce rate; however, most agree on the significant impact divorce can have on the well-being of the family, most notably the children involved. The stresses and tensions related to the separation and divorce process impact the availability of parents for their children (Jackson & Fife, 2018).

Additionally, adverse events, including divorce, poverty, or mental illness, can present a risk for children's mental and physical well-being during crucial developmental years (Demir-Degadas et al., 2018). These are widely referred to as Adverse Childhood Experiences (ACEs). In the current study, the emotional impact of parental divorce was measured using the GHQ-12, and the findings are discussed above.

As previously discussed, Adverse Childhood Experiences (ACEs) refer to the potentially traumatic and negatively influential events during a child's life, including abuse or dysfunction within the home setting (Felitti et al., 1998). Ongoing research suggests many protective factors that may serve a monumental role in preventing or mitigating the impact of these experiences, which are often, if not always, out of the child's control. These factors include positive peer networks, families with strong social

support, and families that engage in activities that are fun, and positive, and create a sense of community within the family unit (McEwen & Gregerson, 2019). This idea reiterates the need for research specific to close familial relationships, such as the sibling relationship that was assessed and discussed in this current study.

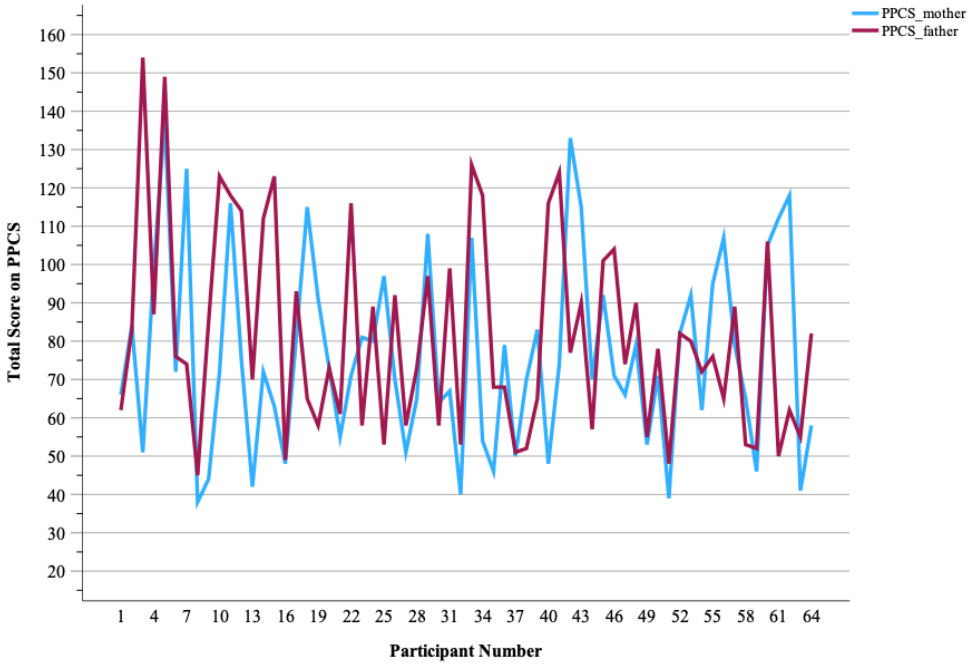
As mentioned, one critical preventative and protective factor for ACEs is close, fun, and positive relationships within the family unit, including peer support. This notion supports the idea of a close sibling relationship. Very little research on this specific relationship exists, as compared to other familial relationship pairings; however, what is known about this relationship suggests high importance. The current research notes that the sibling relationship is the longest-lasting relationship one may have in their life (Gilligan et al., 2020), and is ever-changing throughout the lifespan. The sibling relationship is known to significantly impact a person's overall well-being and development. This, along with the fact that there is limited sibling research, presents the need for more studies to be conducted on this unique family relationship.

As mentioned, the sibling relationship contributes to a person's overall well-being and development. Similarly, family dynamics and relationships can be very influential in the well-being of children as they mature into adulthood. One of the more common ACEs is parental divorce or instability of the family unit. As noted, the divorce rate has fluctuated over the last few decades (Miller, 2017), leading to many instances of broken relationships and difficulties for the children of these relationships. Until this study, little was known about the specific impacts of parental divorce on the lives and development of children.

While not directly defined in the purpose of this study, there are a few findings that may lead to or support future research efforts. The Post-Divorce Parental Conflict Scale (PPCS) is separated into two question sets. First, the measure asks about the mother's behavior towards the father, and then the father's behavior towards the mother. Figure 3 represents the comparison between participant's responses regarding their mother, in blue, and their father, represented in red. Some participants appear to have observed very different behaviors from their mother versus their father, whereas others observed similar behaviors from their parents, both high and low conflict. It is important to note that higher scores on the PPCS indicate high post-divorce conflict.

Figure 3

Comparison of Mother and Father Subset Scores on the PPCS



Additionally, the Post-Divorce Parental Conflict Scale (PPCS) also contains three smaller hostility subscales including Indirect Hostility (IH), Verbal Hostility (VH), and Physical Hostility (PH). Figure 4 compares the scores of the three subscales within the

mother subset, and Figure 5 presents the father comparison. It appears in both subsets; that verbal hostility was a key contributor to the overall post-divorce conflict.

Figure 4

PPCS: Mother Subset with Indirect Hostility (IH), Verbal Hostility (VH), and Physical Hostility (PH) subscales

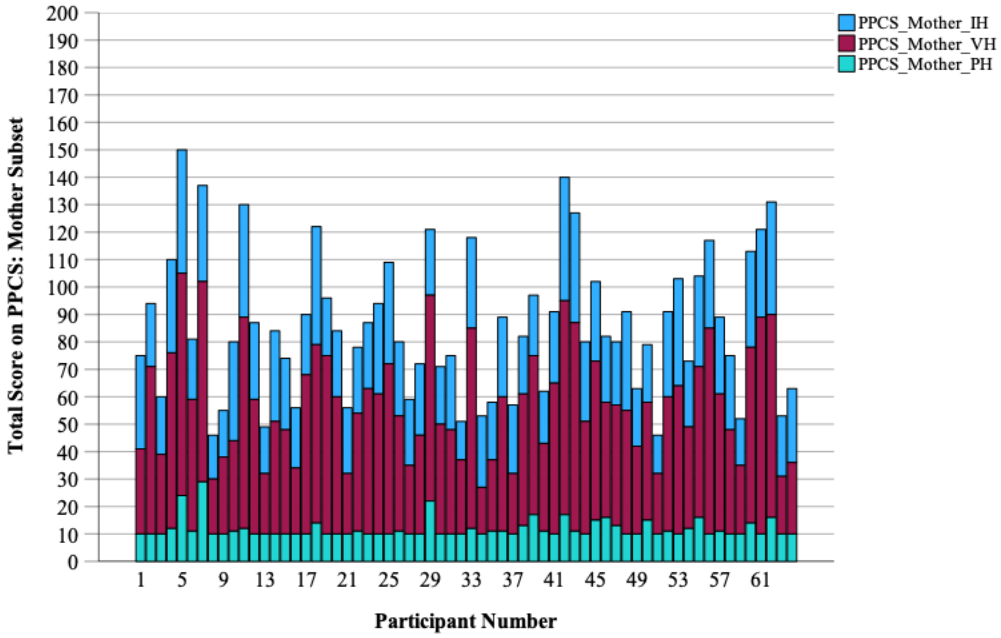
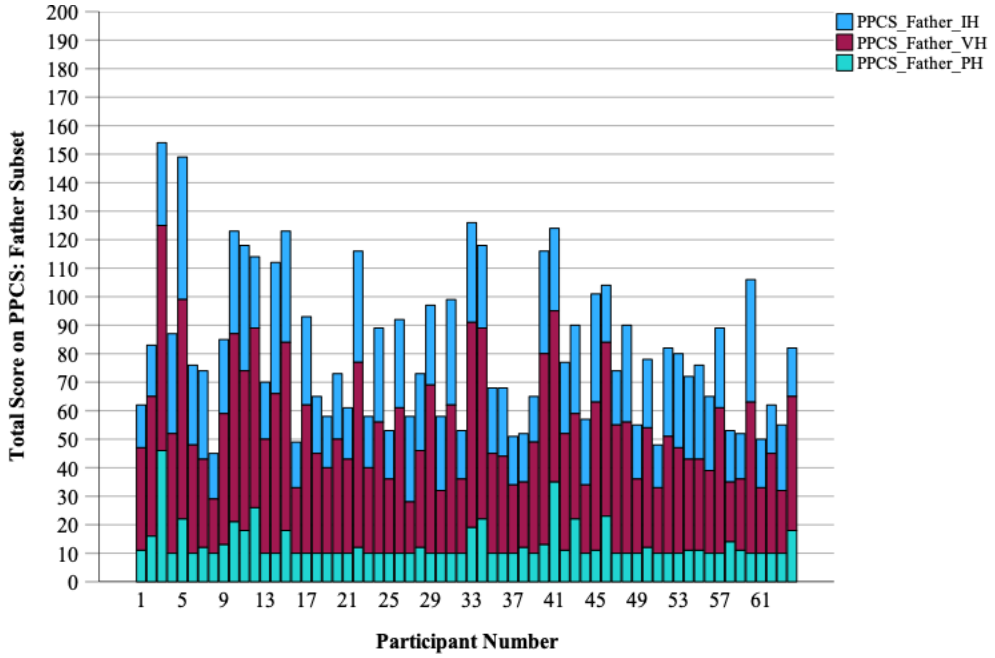


Figure 5

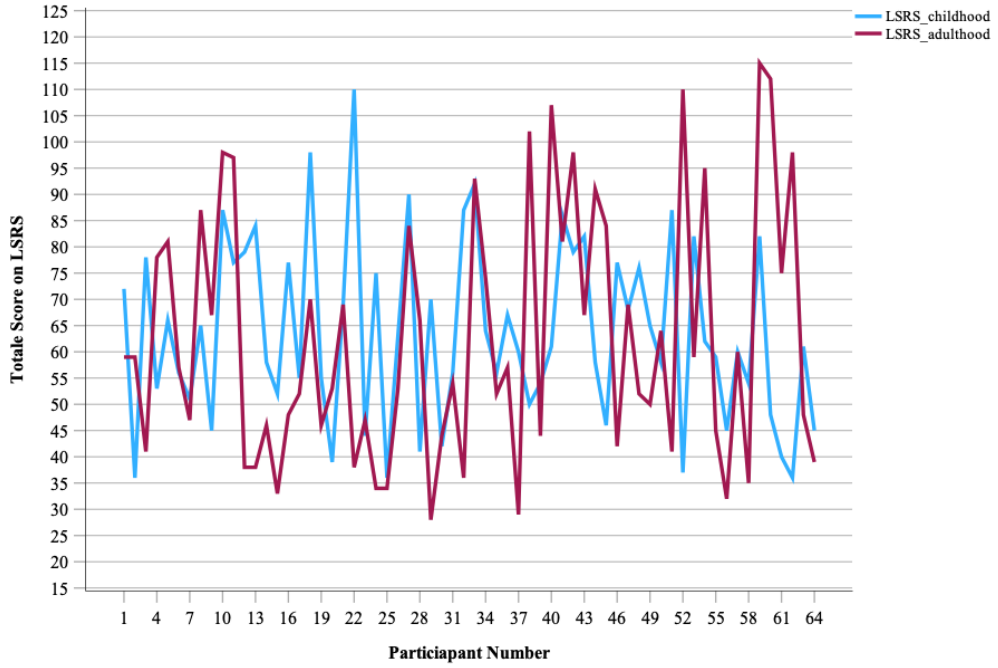
PPCS: Father Subset with Indirect Hostility (IH), Verbal Hostility (VH), and Physical Hostility (PH) subscales



Like the Post-Divorce Parental Conflict scale, the Lifespan Sibling Relationship Scale has two subsets, first participants are asked questions related to their perceived sibling relationship currently, as adults, then they are asked questions specific to when they were children. Figure 6 compares participants' perceived sibling relationship quality when they were children in blue, and their perceived sibling relationship in adulthood in red. There appear to be many instances where the sibling relationship was high in childhood and then low in adulthood. In contrast, other sibling pairs found they had a low sibling relationship quality in childhood but have grown closer and reported that they have a higher perceived sibling relationship in adulthood.

Figure 6

Comparison of Childhood and Adulthood Subset Scores on the LSRS



Theoretical Foundations

In addition to the prior literature and additional findings of the current study, it is also essential to revisit the key theoretical foundations of this study. Attachment theory, as discussed by Pace (2020), proposes that children develop their view of self, others, and their view of relationships, otherwise known as Inner Working Models, from their caregivers. This theory focuses primarily on the early bonds found between infants and their caregivers, such as parents, which is considered crucial to the child's survival through this period of development. As the child continues to develop, the attachment figure can become a secure place where the child can feel comfortable exploring other parts of the world, returning for a sense of security and comfort. The loss of an attachment figure, however, can lead to intense anxiety and distress. This is important to note when considering the impact of family separation due to parental divorce. (Whiteman et al., 2011). All of the participants in this study experienced a parental divorce in childhood. Of the 64 eligible participants, scores on the GHQ-12 ranged from

22 to 33 and were considered to be in the “severe distress range”, according to Khatib (2021). The findings of this study appear to support this theoretical assumption.

In addition to attachment theory and the understanding of the family system and its impact on children’s development and well-being, the Family Ecological Systems Perspective focuses on the larger context of the family and its relationships. The family systems approach focuses on the process of the family system. Typically, families can adapt to changes in internal and external needs by supporting each other. (Whiteman et al., 2011). This framework becomes particularly important when considering the impact that a parental divorce or separation may have on a child’s well-being, as well as the impact of the sibling relationship on the child’s reaction to the parental divorce. This idea is further analyzed by considering the results of the correlation between the parental divorce conflict and the sibling relationship. This correlation is represented in Figure 1 and Table 3. While the statistical test failed to show significance, visually, it appears that in some cases, the higher the post-divorce parental conflict the higher the perceived sibling relationship quality. Further research will be needed to statistically support this idea; however, the findings of this current study suggest the plausibility of this assumption.

Biblical and Spiritual Foundation

While psychological theory offers great insights into research trends and ideas, scripture also contains many themes related to the family. Themes include the family relationship, the marital relationship, and the sibling relationship. When considering this unique relationship and the family unit, it is crucial to consider it within a biblical context. The Bible instructs parents, as the family’s leader, in Proverbs 22:6, to “Train up

a child in the way he should go, even when he is old he will not depart from it.” God intends to have parents lead their children to live a godly servant life for the betterment of all humankind.

Additionally, Psalm 127:3-5 states, "Behold, children are a heritage from the Lord, the fruit of the womb a reward. Like arrows in the hand of a warrior are the children of one's youth. Blessed is the man who fills his quiver with them! He shall not be put to shame when he speaks with his enemies in the gate". (*English Standard Version Bible*, 2001). This reminds parents, as the leaders of their family, to invest love and knowledge into their children, as they are the future of their earthly family and God's family. Both highlight the importance of the family relationship and the importance that it holds for the human race, solidifying the importance of investing in children and supporting them in the best way possible despite the hardships of this earthly life. We consider these ideas as God’s intention for the family structure, intending to spare his people from hardship. Within the context of the current study, readers might first consider this “framework,” so to speak, that God has intended the family to be, and then consider how the reality of the family may have shifted due to outside influences.

Subsequential themes include the marital relationship and the sibling relationship. The sacredness and value placed on the Christian marriage is well known through scripture. Many passages denounce divorce and separation, as seen in Hebrews 13:4 and Matthew 19:9. In both instances, scripture supports the maintenance of the nuclear family above all else. Another key theme discussed in this study, but not as readily within scripture, is the sibling relationship. The Bible seems to primarily present negative examples of the sibling relationship, as seen in Genesis 4 with Cane and Abel, and again

in Genesis 25 and 23 with Esau and Jacob, which outline rivalry and jealousy. Other mentions of "brothers" and "sisters" relate to the larger Christian community and provide the imagery of a united and bonded family. Again, within the context of the current study, these themes present the baseline for which God had intended the family to be. While scripture does not outwardly spell out the positive intention of sibling relationships, it can be implied by considering the examples given in reverse. The assumption is that God intended these relationships to be positive and supportive, instead of rivalrous and competitive.

Ultimately, readers may consider the themes presented in scripture and church teachings as a baseline for which to compare some of the other psychological or scientific findings. The purpose of proposing this connection is to create a well-rounded understanding of what is known or understood about the concept of family within many forms of literature.

Implications

Substantial prior research has shown that early childhood relationships have a lasting impact on children's social, emotional, and academic development. It is believed that children begin to learn the basics of relationships by viewing and hearing their parents. Therefore, if parents model dysfunctional communication and relations, children may be more prone to emulate the same behavior or communication styles. The current research examined the potential link between post-divorce parental conflict and the sibling relationship, as well as a potential link between the sibling relationship and mental health symptoms such as anxiety or depression. While the results of the statistical analysis did not yield a statistically significant result, the raw findings show enough data

to suggest and support further research with a potentially broader, more comprehensive, sample of participants. These suggestions will be discussed in wider detail in the recommendations for further research section.

Limitations

Limitations in this study included difficulty in recruiting and engaging participants to begin and complete the study. This could be due to several factors, including poor recruitment measures, the inability to incentivize participants, and the length of the study measures. Because this was an anonymous study, the researcher could not encourage participants to complete the study measures. It is essential to note the scope of recruitment was a recruitment flyer that was distributed in public places such as coffee houses and gas stations with open posting boards in suburban neighborhoods of Wisconsin, email to both undergraduate and graduate psychology students, and via social media on the researcher's pages. Another limitation that may have impacted this study is the difficulty of controlling for the diversity of participants. Because of the participation criteria, and the nature of recruitment, it was difficult to control for age, gender, or race. Because of this, it is difficult to generalize findings.

Limitations also existed due to the correlational nature of the study. Because of the unique nature of each family dynamic and situation, the study may have been better executed as a qualitative, interview-based study. Correlational studies typically focus on the relationship between two set variables and do not consider the nuances of a situation. The purpose of this study was to, in part, examine both parental divorce conflict and the perceived sibling relationship quality. If participants were interviewed, they would be

able to speak about their experiences from a first-hand account instead of trying to capture their responses using an objective questionnaire with limited response options.

Recommendations for Future Research

Findings emerged from the current research study that provided recommendations and suggestions for future research. The current study examined the correlations between total scores on the Post-Divorce Parental Conflict Scale (PPCS) and the Lifespan Sibling Relationship Scale (LSRS), and the total score on the LSRS and the General Health Questionnaire (GHQ-12). Although a statistically significant relationship was not found in either statistical test, prior literature, and some of the findings of the current study suggest further research. More research is needed in this area, and the researcher believes that a larger sample, or a more diverse sample, may yield a significant result and may add even more insight.

Specifically, it is recommended that future research consider the geographic location, socioeconomic status, and educational implications of recruitment measures. Recruitment flyers were distributed in public areas such as coffee houses, gas stations, and libraries in a suburban neighborhood of southeastern Wisconsin. The population data and demographics are not indicative of the larger US population, and it is possible that recruitment from this area may have impacted the ability for diverse voices to be recorded in the current study. Future research would consider posting recruitment flyers in different types of areas or neighborhoods that may be more indicative of multiple demographics such as urban or rural neighborhoods and locals.

In addition to public posting, recruitment materials in the current study were distributed via email to undergraduate and graduate psychology students at Liberty

University. This assumes a certain socioeconomic status as these participants are currently enrolled in college-level education and assume the financial responsibility of college tuition. Further research might consider recruiting participants from other educational and socioeconomic backgrounds such as recent high school graduates, those enrolled in trade school, or those working in the labor fields. Expanding this recruitment technique may better allow for individuals from different backgrounds and ways of living to participate in a study of this nature and high importance.

In addition to improved recruitment measures and techniques, it is suggested that future researchers reconsider the research design. The current research study utilized a correlational, quantitative format with preset Likert-style instruments. Future researchers might consider a qualitative study with open-ended questions to better capture the nuances of these familial relationships and situations. New insights might be gained by conducting live interviews so that the lived experiences of adult children of divorce can share how they might see the impacts of the parental divorce conflict on their current romantic and familial relationships, their mental health, and overall well-being. Future research may also consider a phenomenological study to capture certain phenomena related to the sibling relationship and the impact of parental divorce on children.

A final suggestion for further research is to widen the sample. Whether that be to recruit more individuals or to intentionally include underrepresented groups in the study sample. As mentioned previously, widening the geographic area of recruitment or being mindful of socioeconomic and educational status might help improve the future sample of participants. Due to the anonymous nature of this current study, it was difficult to control for age, gender, race, or socioeconomic status. Future studies might yield different or

more impactful results if more attention was paid to including these underrepresented voices. This could also include opening the study to same-sex parent groups or parent groups that were never married but shared a significant union. This current study assumed that all parental groups were heterosexual marriages. Future researchers might consider opening their study to different parent groups such as same-sex relationships or parents that were not married but had a significant fighting or conflictual relationship when they separated.

The majority of suggestions for future research center on improving recruitment strategies and the study sample. Future researchers might also consider alternative variables for investigation. The current study focused on comparing the total score on different measures to create the final outcome. Many of the instruments used in this current study, such as the Lifespan Sibling Relationship Scale (LSRS) and the Post-Divorce Parental Conflict Scale (PPCS), have different subsets or subscales. Future researchers might consider utilizing or examining each of the subscales as a way to further explore the impact of the sibling relationship or the impact of parental divorce.

Because this current study appears to be the first of its kind, the results of the study should be used as a building block upon which future researchers can begin to build and grow in their understanding of the sibling relationship and the implications of parental divorce. It is this researcher's belief that expanding upon the ideas, techniques, and methodology discussed in this current study will only improve the realm and understanding of siblings and divorce research.

Summary

The objective of the study was to examine the relationship between parental divorce conflict and perceived sibling relationship quality, as well as perceived sibling relationship quality during parental divorce and mental health symptoms. This study had two goals; the first was to test whether or not the level of post-divorce parental conflict, as measured by the Post-Divorce Parental Conflict Scale (PPCS), had a relational connection to perceived sibling relationship quality, as measured by the Lifespan Sibling Relationship Scale (LSRS). The second goal was to explore whether a higher perceived sibling relationship score would correlate with any mental health symptoms, as measured by the General Health Questionnaire (GHQ-12). A Pearson's r statistical test revealed that there was not a significant relationship between the participant's total score on the PPCS and then LSRS. Similarly, a second Pearson's r correlational test revealed that there was not a significant relationship between the participant's total score on the LSRS and the GHQ-12. This means that there was not enough statistical data to support the original hypotheses.

An additional goal of this current study was to provide more information regarding sibling relationships, specifically during times of adversity and distress such as parental divorce. Similar prior literature suggests that the higher parental conflict that occurs leading up to and the year following a parental divorce can have a significant impact on the children involved. Prior literature also suggests that children, specifically siblings, tend to bond over shared experiences. Early childhood relationships have a lasting impact on children's social, emotional, and academic development. It is believed that children begin to learn the basics of relationships by viewing and hearing their parents. Therefore, if parents model dysfunctional communication and relations, children

may be more prone to emulate the same behavior or communication styles. The current research examined the potential link between post-divorce parental conflict, and the sibling relationship, as well as a potential link between the sibling relationship and mental health symptoms such as anxiety or depression. While the results of the statistical analysis did not yield a statistically significant result, the raw findings show enough data to suggest and support further research with a potentially broader, more comprehensive, sample of participants.

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APPENDIX A: Recruitment Letter (Department Chair)

February 13, 2023

Dr. Rachel Piferi, Ph.D.
Chair
Program Director, Ph.D. in Psychology Program
School of Behavioral Sciences, Liberty University

Dear Dr. Piferi,

As a graduate student in the School of Behavioral Sciences at Liberty University, I am conducting research to better understand the intersection of the sibling relationship, post-divorce parental conflict and mental health. The title of my research project is The Intersection of the Sibling Relationship, Parental Divorce, and Mental Health Symptoms and the purpose of my research is to explore the relationship between post-divorce parental conflict and perceived sibling relationship quality. Additionally, this study seeks to explore the impact of a positive sibling relationship during parental divorce on mental health in adulthood.

.

I am writing to request your permission to utilize your membership list to recruit participants for my research, specifically through the Doctoral Commons page on Canvas.

Participants must be 18 years of age or older, have experienced parental divorce in childhood with a sibling, and the sibling is still currently living. Participants will be asked to complete the Demographics Form, the Post-Divorce Parental Conflict Scale, the Lifespan Sibling Relationship Scale, and the General Health Questionnaire (GHQ-12, by scanning the QR code or following the survey link. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, respond by email to [redacted]. A permission letter document is attached for your convenience.

Sincerely,

Taylor Bufton
Doctoral Candidate

APPENDIX B: Recruitment Flyer

Research Participants Needed

The Intersection of the Sibling Relationship, Parental Divorce, and Mental Health Symptoms

- Are you 18 years of age or older?
- Did you and a sibling experience parental divorce in childhood?
- Is this sibling still living?
- Did your parents engage in a marked amount of conflict following their divorce?

If you answered **yes** to each of the questions listed above, you may be eligible to participate in a research study.

****

The purpose of this research study is to explore the relationship between post-divorce parental conflict and perceived sibling relationship quality. Additionally, this study seeks to explore the impact of a positive sibling relationship during parental divorce on mental health in adulthood.

****

Participants will be asked to complete:

- The Consent Form. This form will take approximately five minutes to complete.
- The Demographics Form. This form will take approximately three minutes to complete.
- The Post-Divorce Parental Conflict Scale. This survey will take approximately ten minutes to complete.
- The Lifetime Sibling Relationship Scale. This survey will take about seven minutes to complete.
- The General Health Questionnaire (GHQ-12). This survey will take about five minutes to complete.

****

Benefits to society include providing information and the impact of parental divorce conflict and the sibling relationship on mental health symptoms and provide future direction for social service-related professionals to provide evidence-based care and future research.

Participants will not be compensated for participating in the study.

****

If you would like to participate, please scan this QR code below.

Taylor Bufton, a doctoral candidate in the School of Behavioral Sciences at Liberty University, is conducting this study.
Please contact Taylor at [redacted] for more information.

Liberty University IRB – 1971 University Blvd., Green Hall 2845, Lynchburg, VA 24515

APPENDIX C: Consent

Consent

Title of the Project: The Intersection of the Sibling Relationship, Parental Divorce, and Mental Health Symptoms
Principal Investigator: Taylor Bufton, Doctoral Candidate, School of Behavioral Sciences, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be 18 years of age or older, experienced parental divorce in childhood with a sibling, this sibling is still living, and your parents engaged in a marked amount of conflict following their divorce. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of this study is to explore the relationship between post-divorce parental conflict and perceived sibling relationship quality. Additionally, this study seeks to explore the impact of a positive sibling relationship during parental divorce on mental health in adulthood.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to complete the following:

1. The Demographics Form. This form will take approximately three minutes to complete.
2. The Post-Divorce Parental Conflict Scale. This survey will take approximately ten minutes to complete.
3. The Lifespan Sibling Relationship Scale. This survey will take about seven minutes to complete.
4. The General Health Questionnaire (GHQ-12). This survey will take about five minutes to complete.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include providing information and the impact of parental divorce conflict and the sibling relationship on mental health symptoms and provide future direction for social service-related professionals to provide evidence-based care and future research.

What risks might you experience from being in this study?

Minimal risk, but the possibility of psychological stress exists. The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life. The risks involved in this study include the possibility of psychological stress from being asked to recall and discuss potentially traumatic or triggering events. To reduce risk, I encourage you to proceed with care and compassion for yourself. Feel free to take a short break, a few deep breaths, or a few minutes to practice self-care before continuing the survey.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be anonymous.
- Data will be stored on a password-locked computer. After seven years, all electronic records will be deleted.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Taylor Bufton. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted]. You may also contact the researcher's faculty sponsor, Kelly Gorbett, at [redacted].

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You can print a copy of the document for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

APPENDIX D: Demographics Questionnaire

1. What is your gender?
    - Male
    - Female
    - Non-binary / third gender
    - Prefer not to say
2. What is your age?
    - 18-29
    - 30-39
    - 40-49
    - 50-59
    - 60 or older
3. What is your race/ethnicity?
    - African American/ Black
    - Asian
    - Hispanic or Latino
    - Native Hawaiian or Pacific Islander
    - Native American or Alaskan Native
    - White/ Caucasian
    - More than one race/ethnicity
    - Prefer not to say
4. Did you experience parental divorce when you were a child?
    - Yes
    - No
5. If yes, did you experience this parental divorce with a sibling?
    - Yes
    - No
6. How many siblings do you have, or did you grow up with?
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6+
7. For the remainder of this study, please choose one sibling/ sibling relationship to report on. What is the current age of the sibling you are choosing to report on?
    - 18-29
    - 30-39
    - 40-49
    - 50-59
    - 60 or older
8. Think back to the time of the divorce. Did your parents engage in a marked amount of conflict following their divorce?
    - Yes
    - No

APPENDIX E: The Post-Divorce Parental Conflict Scale (PPCS)

The Post-Divorce Parental Conflict Scale (PPCS)

This is a scale which measures experiences of people since their parents have been divorced.
All answers are strictly confidential.

Each question is to be answered twice: In the first column write the number that describes your observations during the *first* year after the divorce. In the second column, write the number that describes your observations during the *past* year, that is, during the last 12 months.

Frequency of Occurrence:
1 – The event never happened (Never)
2 – This happened at least once during the year (Seldom)
3 – This happened at least once a month (Occasionally)
4 – This happened at least once a week (Frequently)
5 – This happened every day (Constantly)

1. My mother discussed issues calmly with my father.[2]
2. My mother did not look at my father (i.e., make eye contact) while talking with him.
3. My mother disagreed with things that my father said.
4. When my parents argued, my mother brought in old issues from the past.
5. My mother raised her voice while discussing issues with my father.
6. My mother avoided talking to my father directly.
7. My mother avoided my father's presence.
8. My mother gave me messages to tell my father.
9. My mother told my father that he does not support his children.
10. My mother challenged my father about how he spends money.
11. My mother refused to talk with my father about important things.
12. My mother argued with my father about decisions related to me.
13. My mother nagged my father
14. My mother left the room when my father came in.
15. My mother told my father how he makes her suffer.
16. My mother said negative things about my father's relatives.
17. My mother told my father things just to make him angry.
18. My mother said that she can look after children better than my father can.
19. My mother criticized the presents my father gave me.
20. My mother said things just to spite my father.
21. My mother insulted my father
22. My mother stomped out of the room or slammed the door after a disagreement with my father.
23. My mother avoided mentioning my father's name.
24. My mother shouted and screamed while discussing issues with my father.

25. My mother called my father names.
26. My mother left the house when my father came in.
27. My mother hung up the phone when my father called.
28. My mother told my father that she wished he would drop dead.
29. My mother threatened to hit my father.
30. My mother said that my father doesn't care about me.
31. My mother pushed or shoved my father.
32. My mother threw things at my father.
33. My mother hit my father.
34. My mother kicked my father.
35. My mother bit my father during an argument.
36. My mother threatened my father with a gun or a knife.
37. My mother injured my father in a fight.
38. My mother used a gun or knife against my father.
39. My mother tried to kill my father.

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1. My father discussed issues calmly with my mother. [2]
2. My father did not look at my mother (i.e.., make eye contact) while talking with her.
3. My father disagreed with things that my mother said.
4. When my parents argued, my father brought in old issues from the past.
5. My father raised his voice while discussing issues with my mother.
6. My father avoided talking to my mother directly.
7. My father avoided my mother's presence.
8. My father gave me messages to tell my mother.
9. My father told my mother that she does not support her children.
10. My father challenged my mother about how she spends money.
11. My father refused to talk with my mother about important things.
12. My father argued with my mother about decisions related to me.
13. My father nagged my mother.
14. My father left the room when my mother came in.
15. My father told my mother how she makes him suffer.
16. My father said negative things about my mother's relatives.
17. My father told my mother things just to make her angry.
18. My father said that he can look after children better than my mother can.
19. My father criticized the presents my mother gave me.
20. My father said things just to spite my mother.
21. My father insulted my mother.
22. My father stomped out of the room or slammed the door after a disagreement with my mother.
23. My father avoided mentioning my mother's name.
24. My father shouted and screamed while discussing issues with my mother.
25. My father called my mother names.
26. My father left the house when my mother came in.
27. My father hung up the phone when my mother called.
28. My father told my mother that he wished she would drop dead.

29. My father threatened to hit my mother.
30. My father said that my mother doesn't care about me.
31. My father pushed and shoved my mother.
32. My father threw things at my mother.
33. My father hit my mother.
34. My father kicked my mother.
35. My father bit my mother during an argument.
36. My father threatened my mother with a gun or knife.
37. My father injured my mother in a fight.
38. My father used a gun or knife against my mother.
39. My father tried to kill my mother.

[2] Reversed Item

(Sonnenblick & Schwarz, 1992).

APPENDIX F: Lifespan Sibling Relationship Scale (LSRS)

Lifespan Sibling Relationship Scale (LSRS)

1- Strongly Disagree
2- Disagree
3- Neither Agree nor Disagree
4- Agree
5- Strongly Agree.

1. My sibling makes me happy.
2. My sibling's feelings are very important to me.
3. I enjoy my relationship with my sibling.
4. I am proud of my sibling.
5. My sibling and I have a lot of fun together.
6. My sibling frequently makes me very angry.*
7. I admire my sibling.
8. I like to spend a lot of time with my sibling.
9. I presently spend a lot of time with my sibling.
10. I call my sibling on the telephone frequently.
11. My sibling and I share secrets.
12. My sibling and I do a lot of fun things together.
13. I never talk about my problems with my sibling.*
14. My sibling and I borrow things from each other.
15. My sibling and I "hang out" together.
16. My sibling talks to me about personal problems.
17. My sibling is a good friend.
18. My sibling is very important in my life.
19. My sibling and I are not very close.*
20. My sibling is one of my best friends.
21. My sibling and I have a lot in common.
22. I believe I am very important to my sibling.
23. I know that I am one of my sibling's best friends.
24. My sibling is proud of me.
25. My sibling bothered me a lot when we were children.*
26. I remember loving my sibling very much when I was a child.
27. My sibling made me miserable when we were children.*
28. I was frequently angry at my sibling when we were children. *
29. I was proud of my sibling when I was a child.
30. I enjoyed spending time with my sibling as a child.
31. I remember feeling very close to my sibling when we were children.
32. I remember having a lot of fun with my sibling when we were children.
33. My sibling and I often had the same friends as children.
34. My sibling and I shared secrets as children.
35. My sibling and I often helped each other as children.

36. My sibling looked after me (OR I looked after my sibling) when we were children.
37. My sibling and I often played together as children.
38. My sibling and I did not spend a lot of time together when we were children.*
39. My sibling and I spent time together after school as children.
40. I talked to my sibling about my problems when we were children.
41. My sibling and I were ‘buddies’ as children.
42. My sibling did not like to play with me when we were children.*
43. My sibling and I were very close when we were children.
44. My sibling and I were important to each other when we were children.
45. My sibling had an important and positive effect on my childhood.
46. My sibling knew everything about me when we were children.
47. My sibling and I liked all the same things when we were children.
48. My sibling and I had a lot in common as children.

* Reverse Scored Item

(Riggio, 2000).

APPENDIX G: General Health Questionnaire (GHQ-12)

General Health Questionnaire (GHQ-12)

1. Have you recently been able to concentrate on whatever you're doing?
   0- More than usual 1- Usual 2-Seldom 3- Not at all

2. Have you recently lost much sleep over worry?
   0- Not at all 1- Seldom 2-Usual 3- More than usual

3. Have you recently felt that you are playing a useful part in things?
   0- More than usual 1- Usual 2-Seldom 3- Not at all

4. Have you recently felt capable of making decisions about things?
   0- More than usual 1- Usual 2-Seldom 3- Not at all

5. Have you recently felt constantly under strain?
   0- Not at all 1- Seldom 2-Usual 3- More than usual

6. Have you recently felt you couldn't overcome your difficulties?
   0- Not at all 1- Seldom 2-Usual 3- More than usual

7. Have you recently been able to enjoy your normal day-to-day activities?
   0- More than usual 1- Usual 2-Seldom 3- Not at all

8. Have you recently been able to face up to your problems?
   0- More than usual 1- Usual 2-Seldom 3- Not at all

9. Have you recently been feeling unhappy and depressed?
   0- Not at all 1- Seldom 2-Usual 3- More than usual

10. Have you recently been losing confidence in yourself?
    0- Not at all 1- Seldom 2-Usual 3- More than usual

11. Have you recently been thinking of yourself as a worthless person?
    0- Not at all 1- Seldom 2-Usual 3- More than usual

12. Have you recently been feeling reasonably happy with all things considered?
    0- More than usual 1- Usual 2-Seldom 3- Not at all

(Banks et al., 1980; Liang et al., 2016).

APPENDIX H: Permissions to Use "Lifespan Sibling Relationship Scale"

Measuring Attitudes toward Adult Sibling Relationships: The Lifespan Sibling Relationship Scale

Author:
Heidi R. Riggio

Publication:
Journal of Social and Personal Relationships

Publisher:
SAGE Publications

Date:
2000-12-01

APPENDIX I: Permissions to Use "General Health Questionnaire"

The factor structure of the 12-item general health questionnaire (GHQ-12) in young Chinese civil servants

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The use of the General Health Questionnaire as an indicator of mental health in occupational studies

Author: TOBY D. WALL, ELIZABETH M. STAFFORD, NIGEL J. KEMP, et al
Publication: Journal of Occupational and Organizational Psychology
Publisher: John Wiley and Sons
Date: Aug 17, 2011

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APPENDIX J: Social Media Post Transcript

ATTENTION FACEBOOK FRIENDS: I am conducting research as part of the requirements for a Ph.D. in Developmental Psychology at Liberty University. The purpose of my research is to explore the relationship between post-divorce parental conflict and perceived sibling relationship quality. Additionally, this study seeks to explore the impact of a positive sibling relationship during parental divorce on mental health in adulthood. To participate, you must be 18 years of age or older, experience a parental divorce, have had a sibling when your parents got divorced, and this sibling is still living. Participants will be asked to complete a series of assessment measures including a demographics form, the Post-Divorce Parental Conflict Scale, the Lifetime Sibling Relationship Scale, and the General Health Questionnaire, which should take about 33 minutes to complete. If you would like to participate and meet the study criteria, please click the link below or scan the QR code. A consent document is provided as the first page of the survey.

To take the survey, Click here:
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