EXPLORING SIBLING AGGRESSION

By

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Abstract

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Despite sibling aggression being widely accepted in society, it is the most common form of interfamilial abuse. Research has shown that physical aggression between siblings is positively correlated with negative effects on children. This study focuses on exploring sibling aggression and the differences between genders. 350 participants aged 18 to 35 filled out the Scale of Negative Family Interactions to assess retrospective sibling aggression experiences. This study found more than 99% of participants had a sibling aggression score higher than one. Hypothesis 1 stated that males would have higher total sibling aggression scores than females. Males ($M = 37.30$, $SD = 28.82$) and females ($M = 37.99$, $SD = 28.62$) did not differ significantly on total sibling aggression scores. Hypothesis 2 stated that siblings with three or less years of age between them will report more sibling aggression than farther age-spaced siblings. Support was found for this hypothesis, $p < .001$, $d = 0.50$. Hypothesis 3 stated participants would report aggression occurring most frequently with siblings of the same gender. No significant relationship was found between participant gender and sibling gender, $p = .59$, Cramer’s $V = .03$. Hypothesis 4 stated that sibling aggression would be reported as occurring most often in childhood (before age 11). Not enough evidence was found to support this hypothesis.
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Siblings form highly influential relationships that often last a lifetime (Button & Gealt, 2010; Morrill-Richards & Leierer, 2010). Aggression between siblings (e.g., hitting and humiliation) is highly prevalent and documented as the most common form of family violence (Button & Gealt, 2010; Krienert & Walsh, 2011). However, sibling aggression research is limited (Hardy, Beers, Burgess, & Taylor, 2010). Parent to child abuse and spousal/partner abuse are illegal, but sibling aggression is often viewed as part of growing up (Hardy et al., 2010). Sibling aggression positively correlates with aggression, delinquency, and substance abuse in later life (Button & Gealt, 2010). The purpose of this study is to explore the prevalence of sibling aggression and the differences between genders.

**Literature Review**

**Sibling Aggression**

Sibling aggression is highly prevalent. More so than parent-child aggression (Simonelli, Mullis, Elliot, & Pierce, 2002). For example, in one study over 30,000 cases of sibling violence was reported between 2000 and 2005 (Krienert & Walsh, 2011). Another study found that 42% of their participants had experienced some form of physical aggression by a sibling (Button & Gealt, 2010). Another found that three quarters of men and women reported either being a victim or perpetrator of sibling aggression (physical and verbal/emotional; Hardy et al., 2010). Seventy percent of participants in Kettrey & Emery reported being involved in a severely physical sibling
relationship (2006). Aggression towards siblings was more prevalent than aggression towards non-related children (Felson, 1983; Skinner & Kowalski, 2013). Overt aggression was positively correlated with number of siblings (Kirkcaldy, Richardson-Vejlgaard, & Siefen, 2009). Meaning the more siblings one has the more outward aggression occurring between siblings.

**Defining sibling aggression.** Defining sibling aggression is not easy, due to difficulties in separating typical sibling behavior with atypical (Morill-Richards & Leierer, 2010). For the present study, sibling aggression is defined as aggression between two or more siblings, resulting from conflict or disagreement. It can be physical (hits, kicks, punches, slaps, pushes, shoves, hair pulling, etc.), verbal (threatening, name calling, yelling at, putting down, etc.), relational (excluding them, humiliating them, hiding their toys, spreading rumors about them, etc.), and/or sexual. Physical aggression can be classified in terms of severity; mild, moderate, and severe violence. The interactions that occur between siblings, whether positive or negative, affect their sense of self and perceptions of future relationships, as well as their beliefs and feelings (Hoffman & Edwards, 2004).

The literature presents different terms used to describe sibling aggression. College students in one study described sibling disagreements as follows in descending order: conflict, rivalry, aggression, violence, and abuse. Females showed significantly higher ratings of approval for the term “rivalry” than males. The approval for these terms were based off level of violence by participants. Conflict was associated with no violence and rivalry was associated with severe violence (Kettrey & Emery, 2006). Sibling aggression
has been used interchangeably with all of these. Based on results from an article search, sibling aggression also meant sibling conflict, sibling rivalry, sibling abuse, sibling disputes, and sibling violence.

**Forms of sibling aggression.** There are many different forms of sibling aggression. There are four categories of aggressive sibling behaviors; relational, physical, verbal, and sexual aggression. Most often siblings do not experience just one form of aggression, but a combination or interaction thereof (Wiehe, 1990). Participants of one study reported the most experienced methods of sibling aggression was being verbally teased in a hurtful way, followed by being hit or kicked (physical), then being excluded or ignored (relational; Skinner & Kowalski, 2013).

Verbal aggression includes name calling, belittling, ridiculing, insulting, or degrading them verbally (Morrill & Bachman, 2012). It may also include daily harassments, insults, and threats. Teasing was most commonly reported by siblings (Wiehe, 1990). Verbal aggression most commonly tends to lead to physical altercations between siblings (Tafoya & Hamilton, 2012). This is especially true when the victim-child tries to ignore the verbal attacks. The perpetrator may then result to physical aggression to get a response from the sibling (Wiehe, 1990).

Relational aggression could be intimidating the sibling or continuing to do something that bothers them, even after the sibling has requested they stop. It can be when one sibling exacerbates a fear that the other sibling has. For example, Mary is scared of the dark and her sibling knows this, so while Mary is in a room the sibling turns off the lights creating darkness. A sibling or siblings may reject the other(s) (Wiehe,
1990). It could also be more indirect, such as avoiding them, excluding them from activities, ignoring them, humiliating them in front of others, and purposefully exposing the sibling to danger (Morill-Richards & Leierer, 2010). It can also include destroying the sibling’s possessions or harming their pet (Morrill & Bachman, 2012). Relational aggression is commonly under recognized by parents (Morill-Richards & Leierer, 2010), due to the actual acts being hard to identify.

Physical aggression is defined by one sibling intentionally causing physical harm to another sibling (Morill-Richards & Leierer, 2010). The most common forms of physical aggression are mild, such as pushing and shoving (Button & Gealt, 2009). A study of over 8,000 eighth and eleventh graders found the most common type of sibling aggression was shoving, pushing, and slapping, followed by verbal abuse (Button & Gealt, 2010). In another, pushing, shoving and grabbing was the most common among siblings, followed by threats to hit or having thrown things at their sibling (Hoffman, Kiecolt, & Edwards, 2005). More severe forms of physical aggression are the use of weapons (Button & Gealt, 2009; Krienert & Walsh, 2011), and throwing objects at siblings (Kettrey & Emery, 2006).

Sibling sexual aggression is defined as sexual behavior that is not age appropriate, transitory, or motivated by developmental exploration (Morill-Richards & Leierer, 2010). It does not imply that there must be violence associated with the act(s) in order for it to be deemed sibling sexual aggression. This ranges from inappropriate fondling and exposing oneself to a sibling, to sexual contact and sexual acts (Morrill & Bachman, 2013). Fondling and touching of genitalia was most commonly reported (Wiehe, 1990). Sexual
aggression occurring between siblings is the most prevalent among all forms of sexual abuse (Morrill & Bachman, 2012). Sibling sexual aggression has been found as a common precursor to the sexual offender profile trajectory (Wiehe, 1990).

Sexual aggression between siblings tends to be more prevalent than we may understand. Wiehe (1990) found that 67% of his respondents reported sibling sexual aggression, as opposed to the 33% of physical or emotional abuse reported. It being more prevalent than we may think is in part due to children underreporting the instances. This may be a result of the feelings of embarrassment and shame that arise after such situations take place. It not only goes unreported, but undetected by parents and other siblings.

**Impacts of sibling aggression.** Turning to the impacts of sibling relationships, positive, healthy relationships between siblings is beneficial (Morrill-Richards & Leierer, 2010). These relationships can provide a source of companionship to children and provide opportunities for them to shape one another’s behavior (McHale, Updegraff, & Whiteman, 2012). Positive sibling relationships have been seen to decrease the outcomes of delinquency when the child is experiencing negative parental interaction (Scholte, Engels, Kemp, Harakeh, & Overbeek, 2007). Although there are numerous healthy outcomes resulting from positive sibling relationships, sibling aggression relates to negative effects on the child and their later life relationships.

With regards to short term effects, individuals who experienced sibling aggression tended to report issues in their childhood and adolescence, such as greater distress symptoms (Skinner & Kowalski, 2013; Tucker, Finkelhor, Turner, & Shattuck, 2013),
less feelings of warmth (Tucker et al., 2012), and more aggression towards their peers (Button & Gealt, 2010; McHale et al., 2012). In addition, children suffer long term consequences of sibling aggression. Sibling aggression has been negatively associated with siblings’ feelings of closeness across studies (Updegraff, Thayer, Whiteman, Denning, & McHale, 2005).

Verbally abused siblings show an increased likelihood of hitting someone with the intent to cause physical pain. Being shoved, pushed, or slapped further increased the likelihood. More severe forms of aggression, such as being punched or kicked, increased the odds of aggression by 80% (Button & Gealt, 2010). Sibling conflicts are associated with problems in school (McHale et al., 2012). Children with sibling aggression tend to report alcohol and substance abuse later in life (Button & Gealt, 2010; Solmeyer, McHale, & Crouter, 2013), as well as adolescent delinquency (Button & Gealt, 2010; McHale et al., 2012).

Consequences of sibling aggression are often cumulative and have long lasting effects on future relationships and developmental milestones (Williams, Cogner, & Blozis, 2007). Consistent sibling aggression tends to lead to a lower sense of well-being in adulthood (Morrill-Richards & Leierer, 2010). Children who experienced continuous or severe sibling aggression tend to commit adult violence (Hoffman & Edwards, 2004). One study found that individuals who hit their siblings in childhood are more likely to hit their partners in adulthood, especially for women (Tyree & Malone, 1991 as cited in Hardy et al., 2010). In another, men and women that reported abuse from siblings also
tended to report, perpetrated and received, emotional, physical, and sexual violence with a partner (Simonelli et al., 2002).

**Parental perceptions and responses.** Majority of children tell their parents about physical and verbal sibling aggression, and it often takes place in front of parents (Skinner & Kowalski, 2013; Wiehe, 1990). Many parents view sibling aggression as normal and healthy (Kettrey & Emery, 2006; Kramer & Baron, 1995; Krienert & Walsh, 2011). They also believe that it helps the child learn how to handle conflict with others when they get older. Parental acceptance of sibling aggression may stem from personal experiences with their siblings. Those who experienced sibling aggression are more accepting of it when they witnessed it in their own children (Hardy et al., 2010).

Individuals are hesitant to talk about family violence, whether it be spousal or child abuse, but they easily brush off discussing sibling aggression by saying it is normal (Kettrey & Emery, 2006; Skinner & Kowalski, 2013). Parents may also be unwilling to get involved stating, “You guys need to learn to get along better” (Wiehe, 1990).

To further illustrate this point, parental responses to sibling aggression are most commonly ignoring or minimizing the aggression and disbelieving that the abuse was occurring (Wiehe, 1997). Some parents may even blame the child for what happened and believe they deserved it. When parents are told by their child that their sibling is harming them, parents tended to tell the child, “You must have done something to deserve it” or become angry and punish both of the children (Wiehe, 1990).

The above mentioned perceptions are not true for sibling sexual aggression. Only a small percentage report their sexual aggression to their parents. This may be due to
shame and embarrassment, as well as the child not identifying it as wrong, threats of what will happen if they tell, and blaming themselves for what happened (Wiehe, 1990).

Parental perceptions also vary according to their child’s gender. For mild physical aggression, such as grabbing, parents were more likely to stop or intervene their female children more often than their male children (Martin & Ross, 2005), which allows them to continue their behavior.

**Sibling perceptions of aggressive interactions.** In addition to sibling aggression shaping behaviors, it may also influence their perceptions of sibling conflict. There is a strong association of sibling aggression in childhood with increased acceptability of it in others (Hardy et al., 2010; Hoffman & Edwards, 2004). Siblings themselves tend not to view their sibling aggression as “bad” (Krienert & Walsh, 2011). Children who have experienced some form of sibling aggression tend to perceive it as normal and expected (Skinner & Kowalski, 2013). They tend to rate other’s sibling aggression behaviors as less intense than those who have not experienced sibling aggression. This may further the prevalence of sibling aggression.

**Gender Influences**

Some studies find no differences in aggression between men and women in terms of levels of aggression and for relational aggression (Lansford et al., 2012). However some studies do find differences in level of sibling aggression between men and women (Felson, 1983; Morrill & Bachman, 2012). It is suggested that males are more physically aggressive than girls (Martin & Ross, 2005; Minnett, Vandell, & Santrock, 1983).
Adolescent boys were found more likely to engage in proactive aggression than girls (Tucker et al., 2013) and young boys had the highest levels of physical aggression within sibling relationships (Martin & Ross, 2005; Williams et al., 2007). In contrast, one study found sisters had the highest levels of relational aggression (Minnett et al., 1983). In another, females reported violent sibling relationships more than males (Kettrey & Emery, 2006). Females reported more than males that they had sexually abused a sibling (Morrill & Bachman, 2012). Some studies found differences in genders and their perceptions of sibling aggression. For example, one study of over 500 undergraduate students, males tended to be more accepting of sibling aggression than females (Hardy et al., 2010), specifically males with a brother (Hardy et al., 2010; Hoffman et al., 2005).

Gender differences are seen in sibling aggression levels when analyzing sibling dyads, however the results are mixed. Some studies suggest this is more important to analyze than gender of the individual (Williams et al., 2007). Older brother/younger sister dyads had higher scores of aggression in observed conflict than older sister/younger sister and older sister/younger brother (Aguilar, O’Brien, August, Aoun, & Hektner, 2001). Boy-boy sibling dyads were found to have the highest amounts of aggression and hostile behaviors towards one another than any other dyad (Minnett et al., 1983; Tucker et al., 2013; Williams et al., 2007). They tend to engage in more pushing, shoving, grabbing, punching, restraining, and other severe forms of physical aggression than the other dyad compositions (Hoffman et al., 2005). Just having an older male sibling was associated with higher scores of aggression, conflict, and negative affectivity.
Young children tended to be more aggressive and dominant with a same sex sibling (Minnett et al., 1983).

**Age and Year Spacing**

Sibling rivalry is highest around age two and then declines as children age (Eriksen & Jensen, 2006; Van Volkom, Machiz, & Reich, 2011), occurring the least in adulthood. Siblings born within three years of one another tend to show the most aggression towards one another (Sulloway, 1996; Tucker et al., 2012) due to competing for resources (Toman, 1993) and high rates of similarity (Minnett et al., 1983). In one study, children with 1-3 year age gap scored significantly higher on sibling conflict, aggression, and negative affectivity than children with 4-6 year age gap (Aguilar et al., 2001; Toman, 1993). In another, 53% of sibling aggression cases reported involved siblings that were less than three years apart (Krienert & Walsh, 2011). Aggression was more common between closely age-spaced siblings (Minnett et al., 1983; Riggio, 2006). Sulloway suggested this is due to an increased competition for parental investment (1996). More closely spaced siblings are more likely to share friends and interests, which can fuel aggression stemming from jealousy and competition (Minnett et al., 1983).

**Theoretical Frameworks**

Hoffman and Edwards (2004) believes there is a strong need for empirical testing of the theoretical frameworks that support sibling aggression. Many theories exist that try to explain why sibling aggression occurs; Feminist theory, Social learning model,
Conflict theory, Sibling rivalry model, and Buffering hypothesis. The present study will examine the sibling rivalry model.

Sibling rivalry as a realistic conflict model. The sibling rivalry model states that aggression occurs because of jealousy of the younger sibling. It hypothesized that jealousy came from the older sibling because the younger sibling received more attention from the parents, thus depriving the older one of attention. This tends to begin within months of the sibling being born (Adler, 1927; Erikson & Jensen, 2006). This model assumes that this jealousy and frustration felt by one sibling is released as aggression (Felson, 1983).

This model is viewed as aggression between siblings stemming from nonrealistic conflict. Therefore, it does not explain why siblings would have conflicts around parental treatment and favoritism. Nor did it include when younger siblings succeed during sibling altercations and its influence on aggression. It looked at their conflicts as unrealistic. Felson presented an extended model, taking the sibling rivalry model one step further. He presented the sibling rivalry as a realistic conflict model. This implied that siblings would fight over realistic issues; “their aggression is fundamentally instrumental” (Hoffman & Edwards 2004). Siblings use aggression in hopes of gaining something and to avoid other things. They may want to gain power, control, social status, and access to resources, parental attention, and treatment. They may want to avoid doing chores or avoid being overpowered by their siblings. Instead of, aggression becoming overt due to blind anger or gain parental attention (Hoffman & Edwards, 2004). The choice to fight
depends on the perceived rewards and costs (Felson, 1983) and aggression becomes overt under structured conditions.

Felson’s model presumes the siblings’ household as a structured condition that breeds sibling aggression. They may compete for space, time, attention, property, and tangible goods (Hoffman & Edwards, 2004) which causes tension and disputes. They tend to have varying divisions of labor, in which siblings compete for desired chores and fight over the contribution given to the chore. Siblings that are closer in age tend to have to share more space and property. Siblings of the same sex tend to have to share more property and tangible goods (Felson, 1983).

Another structured condition, according to Felson’s model, where sibling aggression becomes overt is strategic factors. Siblings learn strategic methods to their conflicts, with parental intervention at the root. Younger siblings are sometimes the provocateurs of aggression during a dispute because parents intervene, and “protect” the younger sibling. Protection can be punishment to the older sibling, separation of the siblings, or stopping the conflict. As a result, younger siblings are more likely to be aggressive because parental intervention is anticipated (Felson, 1983). In summary, this model implies the closer siblings are in age the more aggression that may occur. Siblings of the same gender will fight more frequently than those of opposite gender.

**Statement of Problem**

The relationships formed within the family are central to child development. Siblings’ relationships are some of the most influential dynamics in the familial system.
When a sibling relationship is positive and supportive then children have positive outcomes. However, when a sibling relationship is not positive, the children tend to have negative outcomes (Button & Gealt, 2010, McHale et al., 2012; Morrill-Richards & Leierer, 2010). Siblings shape one another’s behavior and development through their companionship and interactions throughout their childhood (McHale et al., 2012; Morrill-Richards & Leierer, 2010). The sibling bond and interactions affect children’s perceptions, beliefs, feelings, and future relationships (Hoffman & Edwards, 2004; Kettrey & Emery, 2006; Skinner & Kowalski, 2013). Non-aggressive sibling conflicts can promote social development in children (Kramer & Baron, 1995).

The prevalence of sibling aggression alone shows the need for more research. Sibling aggression is the most occurring type of aggression in the familial system (Felson, 1983). However, it is the most understudied. A lot of attention is paid to spousal aggression and parent-child aggression. Conflict between siblings is seen as so common that most American parents view it as natural. Despite this, research has shown negative outcomes result from negative sibling relationships, such as delinquency and drug use (Button & Gealt, 2010) and negative psychological well-being (Hoffman & Edwards, 2004; Skinner & Kowalski, 2013). A child who is highly aggressive with their siblings may be highly aggressive to other children. More research needs to be done on sibling aggression so that society can make informed conclusions about it.

Parents tend to believe that sibling aggression is natural and that children learn to resolve conflicts through sibling aggression (Eriksen & Jensen, 2006). Several studies have shown that individuals tend to dismiss physical violence among siblings (Kettrey &
Emery, 2006; Tucker et al., 2013). Parental dismissal of aggressive sibling interactions can have harmful effects on the children’s psychological demeanor (Hoffman & Edwards, 2004). This social and cultural acceptance of sibling aggression could potentially be harmful. There is higher perceived acceptability of aggressive sibling conflicts from parents that have experienced sibling aggression (Kramer & Baron, 1995). Meaning people who experience sibling aggression tend to be more accepting of it, which may create a cycle. More research in sibling aggression may help reduce parental acceptability of sibling aggression.

Another problem is that there is a lack of empirical research. We have comprehensive understandings of other types of family aggression because they are studied much more. Whiteman, McHale, & Crouter (2007) states that more research is needed to examine the individual, family, and environmental factors influencing sibling interactions. In order to effectively implicate a treatment model for sibling conflict, additional research related to prevalence is needed. It is also needed to gain a deeper understanding on how deeply rooted this problem is in our society (Morill-Richards & Leierer, 2010). Hoffman, Kiecolt, & Edwards (2005) states the need for more research on sibling aggression because it is highly prevalent, the least studied of all interfamilial violence, and identified to have negative outcomes. They also state that further research should be integrating and testing the existing theories of family violence.

How a child interacts with their siblings may be an indicator of how they will relate to other children as they grow up. A child that is aggressive to their siblings may be aggressive to other children. More research is needed to examine the “sibling
abuse/bullying connection” (Krienert & Walsh, 2011). Eriksen & Jensen (2006) stated that the exploration of sibling relationships as a precursor to development of bullying behavior is needed. Abusive sibling interactions may lead to normalization of aggressive interpersonal behaviors in the child (Morrill-Richards & Leierer, 2010). More research on sibling aggression can help add insight to this.

Two important aspects that previous studies have noted for furthering research in this field is diversity in sample and a need for larger sample sizes. The growing immigrant population in the United States also necessitates the need for more research on sibling relationships of diverse ethnic groups (McHale et al., 2012). Aguilar et al. (2001) states it is important for studies of sibling aggression to use large sample sizes for added power. This study will examine sibling aggression with a larger sample size for added power.

**Primary Hypotheses**

Based on the literature, I have made the following hypotheses:

1. Males will have higher total sibling aggression scores than females.
2. Siblings with 3 or less years of age between them will report more sibling aggression than farther age-spaced siblings.
3. Participants will report aggression occurring most frequently with siblings of the same gender.
4. Sibling aggression will be reported as occurring most often in childhood (before age 11).
Summary of Research Purpose

This study looks to explore the current prevalence of sibling aggression. This study will contribute to the knowledge in this field and increase empirical research to support existing theoretical frameworks. Due to its prevalence, acceptability, and potentially negative consequences, sibling aggression is an important aspect of the familial dynamic and needs to be studied more. It is also an important aspect to study for the well-being of our children.
Method

Participants

Total number of questionnaires used in data set was 350. Total number of survey responses was 756. Participants (n = 271) that did not finish the survey, meaning they left the Scale of Negative Family Interactions blank, were excluded from the data set. These also included those who withdrew from the survey at any point. Of those that did not finish, 88% of them only filled out the first demographic page. Participants (n = 125) that completed the survey but were not aged 18 to 35 years old were excluded from study. Of those excluded, 62% were over the age of 40. Participants (n = 6) who were from multiple births (twins, triplets, etc.) were excluded, as this presents another dynamic for siblings. Participants (n = 4) that were only children were also excluded from the data set. Data set consisted of 350 participants after exclusions were finalized.

Participants identified as female (83%), male (16%), and other (< 1%). Participants included those currently residing in California (n=300) and those living elsewhere (n=50). When participants were asked their highest level of education, 41% of stated having some college education, followed by 18% Bachelor’s Degree, 16% high school diploma, 11% Associate Degree, 4.8% Some high school, 4.6% Master’s Degree, 2.6% GED, and 0.6% Doctorate. Mean number of siblings for participants was 3.09. Mean number of siblings that participants grew up with in the home was 2.43.
Participant recruitment started after receiving IRB exempt approval #14-148 on 3/9/2015 and was finished on 3/15/2015. Participants were recruited by posting the survey link to facebook.com, reddit.com, craigslist.com, online.supportgroups.com, and Hanover College. Email forwards were utilized to get the survey link distributed and shared. Flyers were posted around Humboldt State University campus and various community post boards with detachable survey links throughout Arcata and Eureka.

**Instrumentation**

The first page of the questionnaire was an introduction form (See Appendix A), explaining informed consent and participants’ right to withdraw from the study at any time. The next page assessed demographic questions (See Appendix B); exclusion criteria questions, age, gender. This part included questions that assess age and gender of siblings, how many siblings they have, how many of each type of sibling they have, and how many sibling they grew up with in the home (Corsini & Wedding, 2011). After the Scale of Negative Family Interactions three additional demographic questions followed. These assessed where participant grew up, current location, and highest education level.

**Assessing sibling aggression.** The Scale of Negative Family Interactions (SNFI) followed after the demographics page. Its intended use is for examining sibling violence (Simonelli, Mullis, & Rohde, 2005). It was designed specifically to be administered to adolescents and adults as a retrospective measure. It consists of emotional, physical, and sexual aggression subscales for mother, father, older sister, younger sister, older brother, and younger brother. Mother and father sections were omitted for the present study. This
scale defines siblings as “biological, adoptive, foster, half, steps, or any child that lived with your family” (Simonelli et al., 2005). If participants have more than one sibling in the same category (e.g., two younger brothers) then answers should be reflect the greatest amount of sibling aggression experienced. The SNFI includes verbal and relational aggression in its emotional subscale.

It is a 34 item measure on a four point scale ranging from 1 (never) to 4 (seven or more times). This study used a four point scale ranging from 0 (never) to 3 (seven or more times). The SNFI may be adopted to various time frames with a specified time period indicated on it. It was used because it simultaneously measures three types of aggression for each sibling the participant may have.

SNFI has a test-retest reliability score of .89 and its overall internal consistency score is .98. Validity was measured by comparing 120 participants scores on the SNFI to their scores on the Conflict Tactics Scale and Symptom Checklist 90 (Simonelli et al., 2005).

Scores are obtained by summing all the items in each scale or subscale. Questions 1 through 9 make up the emotional aggression scale (e.g., “Made fun of you in a hurtful way”). Questions 10 through 24 make up the physical aggression scale, (e.g., “Pushed, shoved, or pulled you”). Questions 25 through 34 make up the sexual aggression scale, (e.g., “Intentionally exposed himself or herself to you”). The SNFI questionnaire is located in appendix C. Scores were obtained by summing the three subscales together. Each participant received a total sibling aggression score and three subscale scores.
Procedure

Surveymonkey.com was used to administer the survey. The consent form and questionnaire was posted on the internet site Surveymonkey.com. Surveymonkey created a web link for the study in order to collect responses. Survey was open from 3/9/2015 to 3/15/2015. The survey link opened to the questionnaire where participants completed an informed consent form. Participation was anonymous. Approval for this study was obtained through Institutional Review Board; approval # 14-148. The researcher asked that participants not to put identifying information in the questionnaire to protect their anonymity.

Statistical Analyses

Hypothesis 1 and 2 were tested using Independent Means t-test. Hypothesis 3 was tested using Chi-Square Independence test. Hypothesis 4 was tested using frequencies statistics.
Results

Primary analyses

Prevalence of sibling aggression was assessed by summing participant’s scores on the Scale of Negative Family Interactions (SNFI) and using frequency statistics. Those that scored a one or higher were considered to have experienced sibling aggression and included in prevalence percentages. More than 99% of participants (n = 348) had a sibling aggression score higher than one. Ninety eight percent of participants (n = 344) scored higher than one on the emotional subscale. Ninety two percent of participants (n = 324) scored a one or higher on the physical subscale and 28% (n = 99) scored a one or higher on the sexual subscale. Participants’ mean scores and range of actual scores can be seen in Table 1 for the SNFI and each subscale.

Table 1

Participants’ Means and Standard Deviations for SNFI and Subscales

<table>
<thead>
<tr>
<th>Area of Score</th>
<th>M</th>
<th>(SD)</th>
<th>Range of Actual Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNFI total score</td>
<td>38.21</td>
<td>(28.89)</td>
<td>0 - 193</td>
</tr>
<tr>
<td>Emotional Subscale</td>
<td>21.07</td>
<td>(13.64)</td>
<td>0 - 79</td>
</tr>
<tr>
<td>Physical Subscale</td>
<td>16.11</td>
<td>(15.99)</td>
<td>0 - 114</td>
</tr>
<tr>
<td>Sexual Subscale</td>
<td>1.03</td>
<td>(2.89)</td>
<td>0 - 23</td>
</tr>
</tbody>
</table>
Hypothesis 1 stated that males would have higher total sibling aggression scores than females. To test this participants’ gender and their SNFI total score were entered into the analysis. Levene’s test indicated equal variances ($p = .89$). Males ($M = 37.30, SD = 28.82$) and females ($M = 37.99, SD = 28.62$) did not differ significantly on total sibling aggression scores, $t(348) = -0.163, p = .87, d = 0.02$. 95% CIs [-8.9, 7.5] around the differences. These results do not support Hypothesis 1.

Hypothesis 2 stated that siblings with three or less years of age between them will report more sibling aggression than farther age-spaced siblings. To test this each participant was put into a category depending on whether they were 3 years or less than their sibling or not. This was based on participants’ response to question “How many years apart are you and that sibling? (From previous question)”. Participant’s age spacing and total SNFI score was entered in the test. Levene's Test for Equality of Variances indicated unequal variances ($p = .03$), so degrees of freedom were adjusted from 348 to 340. Participants with 3 years or less between them ($n = 212, M = 43.58, SD = 30.19$) and sibling indicated scored significantly higher on total sibling aggression scores than those who had more than 3 years between them ($n = 138, M = 29.96, SD = 23.26$) and their chosen sibling, $t(340) = 4.694, p < .001, d = 0.50$. 95% CIs [7.572, 19.69] of the difference around the means. These finding show support for Hypothesis 2.

Hypothesis 3 stated participants would report aggression occurring most frequently with siblings of the same gender. To assess this, participants were asked to choose which sibling they had the most sibling aggression with. They were only allowed to choose one. For Hypothesis 3, the Chi-Square Test of Independence was used to
analyze whether there was a relationship between participants’ gender and the chosen siblings gender. Sibling gender variable was created based off participant’s response to question, “Which sibling did you have the most sibling aggression with?” Values were then assigned in sibling gender variable as follows, 1 = older brother/younger brother, 2 = older sister/younger sister. Participants that indicated “other” gender were excluded from this analysis. No significant relationship was found between participant gender and sibling gender, \( x^2 (1, N = 348) = .28, p = .59 \), Cramer’s \( V = .03 \). Males tended to indicate sibling aggression occurred the most with brothers. Females tended to indicate that sibling aggression occurred the most with sisters. Percentages and frequency counts can be seen in Table 2.

Table 2

*Males’ and Females’ Indicated Sibling for Most Sibling Aggression With*

<table>
<thead>
<tr>
<th></th>
<th>How often older brother/younger brother was selected</th>
<th>How often older sister/younger sister was selected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent (( n ))</td>
<td>Percent (( n ))</td>
</tr>
<tr>
<td>Males</td>
<td>52% (29)</td>
<td>48% (27)</td>
</tr>
<tr>
<td>Females</td>
<td>48% (140)</td>
<td>52% (152)</td>
</tr>
</tbody>
</table>
Hypothesis 4 stated that sibling aggression would be reported as occurring most often in childhood (before age 11). Due to an error in the survey, participants were allowed to choose more than one time frame. This means that indicated response sums will not equal number of participants and, more importantly, that significance tests are not available for this comparison. Based on response indicated participants were split into 2 categories; under 11 years old or over 11 years old. According to frequency statistics, participants indicated that sibling aggression was slightly more common at age 11 or younger. These findings show limited support for Hypothesis 4. Although there appear to be small differences (63% vs. 60%), these do not appear large enough to provide compelling evidence in support of Hypothesis 4. These frequencies can be seen in Table 3.

Table 3

*Age Time Frame Sibling Aggression Occurred the Most for Participants*

<table>
<thead>
<tr>
<th>Age Frame</th>
<th>Participant Responses</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 11yrs.</td>
<td>Yes</td>
<td>63% (220)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>37% (130)</td>
</tr>
<tr>
<td>Over 11yrs.</td>
<td>Yes</td>
<td>60% (209)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>40% (141)</td>
</tr>
</tbody>
</table>
Additional Analyses

Independent means t-test examined differences between gender and subscale scores. Levene's Test for Equality of Variances and t-test for Equality of Means were ran. Levene’s test indicated equal variances ($p = .994$) between the groups for the emotional subscale. Males and females did not differ significantly in scores on the emotional aggression subscale ($p = .60$). Levene’s test indicated equal variances ($p = .842$) for the groups on the physical aggression subscale. Males and females did not differ significantly in scores on the physical aggression subscale ($p = .78$). Levene’s test indicated equal variances ($p = .20$) for the groups on the sexual aggression subscale. Males and females did not differ significantly in scores on the sexual aggression subscale ($p = .47$). Males and females mean scores on each subscale, as well as $t$, $d$, and CIs, can be seen in Table 4.
Table 4

*Mean SNFI Scores for Males and Females*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Males M (SD)</th>
<th>Females M (SD)</th>
<th>t</th>
<th>d</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional</td>
<td>20.1 (13.26)</td>
<td>21.1 (15.82)</td>
<td>-0.521</td>
<td>0.07</td>
<td>[-4.93, 2.86]</td>
</tr>
<tr>
<td>Physical</td>
<td>16.6 (15.72)</td>
<td>15.8 (15.90)</td>
<td>0.280</td>
<td>0.04</td>
<td>[-3.90, 5.20]</td>
</tr>
<tr>
<td>Sexual</td>
<td>0.75 (2.12)</td>
<td>1.1 (2.95)</td>
<td>-0.722</td>
<td>0.11</td>
<td>[-1.11, 0.51]</td>
</tr>
</tbody>
</table>

Note. CI = confidence interval around the differences between means.

Chi-square Independence tests were used to determine if there was a relationship between participants’ gender and whether or not sibling indicated was older or younger. Older brothers and sisters comprised one category and younger brothers and sisters the other. There was a significant relationship between participants’ gender and older/younger siblings, $x^2 (1, N=348) = 4.56, p = .03$, Cramer’s $V = .12$. Males (63%) tended to indicate older siblings more than females (47%) as having the most sibling aggression with. Females (53%) tended to indicate younger siblings as having the most sibling aggression with more than males (37%).
Discussion

The purpose of this study was to better understand the prevalence of sibling aggression, when sibling aggression is highest, and who siblings fight with most often. This study also looked to test Felson’s Sibling Rivalry as a Realistic Conflict Model (1983).

Nearly all of the participants reported some form of sibling aggression. The present study found sibling aggression to be highly prevalent. This is consistent with majority of previous research (Button & Gealt, 2010; Krienert & Walsh, 2011). The number of participants found in this study that experienced sibling aggression far exceeds previous research. Past studies found three quarters (Hardy et al, 2010; Kettrey & Emery, 2006), and less than half (Button & Gealt, 2010) of their participants experienced sibling aggression. This studies prevalence rates are important considering the research that connects child negative well-being and distress symptoms with sibling aggression (Button & Gealt, 2010; McHale et al., 2012; Skinner & Kowalski, 2013; Tucker et al., 2012; Tucker et al., 2013; Updegraff et al., 2005). Finding a higher prevalence rate could be due to the way prevalence was determined. The SNFI does not present set cutoff score to determine mild, moderate, or severe aggression. This study’s method of considering anyone scoring a one or higher could have impacted the prevalence rate.

This study hypothesized that males would score higher on the Scale of Negative Family Interactions Scale. Sibling aggression scores were not higher for males and therefore did not find support for Hypothesis 1. This is not in concordance with the
majority of previous research. The studies that had similar results were Kettrey & Emery (2006) and Williams et al., (2007). However, all these other studies (Felson, 1983; Martin & Ross, 2005; Minnett et. al, 1983; Morrill & Bachman, 2012; Tucker et al., 2013) found differences between males and females. In this study, males and females had nearly identical scores on the SNFI which shows they experience sibling aggression equally. This could be due to this age population growing up with more liberal gender roles now than those in previous research.

To evaluate this further, males’ and females’ scores on each subscale were compared. Their scores were similar on all of the subscales. This means that males and females did not differ in terms of how much emotional, physical, and sexual sibling aggression they experienced. This was not consistent with what other studies had found. One study found females had the highest levels of relational aggression (Minnett et al., 1983). Relational aggression is assessed in the SNFI’s emotional subscale. Again this could be due to children now days have relatively similar experiences of sibling aggression.

This study found support for Hypothesis 2, that participants who had higher sibling aggression tended to be within three years of age from their chosen sibling. This has been found in previous studies also. The present study found 61% of participants indicated most sibling aggression occurring with siblings who were within three years of age to them. Others have found similar results (Aguilar et al., 2001; Krienert & Walsh, 2011; Minnett et al., 1983; Riggio, 2006; Sulloway, 1996; Tucker et al., 2012). According to Felson, (1983) this is due to siblings competing for resources (Toman,
1993) and having high rates of similarity (Minnett et al., 1983). He also concluded that closely age-spaced siblings are more likely to share friends and interests, which can fuel aggression (Minnett et al., 1983). The present study’s finding supports Felson’s (1983) Sibling Rivalry as a Realistic Conflict Model. This finding extends earlier research as a retrospective study and uses a young adult sample.

The current study found that participants did not have the most sibling aggression with those of the same gender and did not support Hypothesis 3. Most of previous research states that individuals tend to have more sibling aggression with siblings of same gender. Some studies stated that boys were more aggressive with their brothers (Minnett et al., 1983; Tucker et al., 2013). A few noted that girls had most aggression with their sisters (Kettrey & Emery, 2006). Felson (1983) stated that siblings of the same sex tend to have to share property and tangible goods, which can fuel sibling aggression. The results in this study were not significant enough to support this. Although the frequencies show that participants had more sibling aggression with same gendered siblings, they were not significant.

To further examine this, the relationship between participants’ gender and whether the sibling indicated was older or younger was analyzed. The present study found that male participants tended to indicate that they had the most sibling aggression with those siblings who were older than them, regardless of the sibling’s gender. Female participants tended to indicate that they had the most sibling aggression with siblings who were younger than them, regardless of the sibling’s gender. This could be because females tend to be given caregiver roles over their siblings by their parents more so than
males. Thus creating a structured condition that allows for sibling aggression. The older female sibling has to get younger siblings to comply and may use aggressive tactics. Younger siblings may not wish to comply with older siblings’ requests and may respond aggressively.

The present study did not find that sibling aggression occurs most frequently before age 11, and doesn’t support Hypothesis 4. This may be due to the survey error that occurred and caused significance tests to not be available for this comparison. In this study participants indicated that sibling aggression was slightly more common at age 11 or younger. However these differences between the two groups do not appear large enough to show support for Hypothesis 4. Previous research found opposite results (Eriksen & Jensen, 2006; Van Volkom, Machiz, & Reich, 2011).

Not finding significant results in this study could also be a result of using only one measure to determine adult’s experiences with sibling aggression. Few past studies used a retrospective self-report measure on adults to determine levels of sibling aggression.

**Limitations and Implications for Further Research**

Allowing participants to choose more than one time period on the survey for “when sibling aggression occurred the most”, did not allow for Chi-square tests to be used. Future studies should only allow one option to be chosen by participants when asking, “When did sibling conflict/sibling rivalry/sibling aggression occur the most frequently?” This will allow for proper analyses to be utilized.
As stated in Simonelli et al. (2005) the SNFI is a retrospective study that relies on participants’ honesty and accurate recall of events. Participants’ lack of ability to recall their childhood memories can pose as a limitation. Participants’ may not report some sibling interactions that occurred and poses as a limitation as well. The use of only this measure in a study is a limitation, since more than one measure can aid researchers in a more comprehensive examination of sibling aggression.

Further research may benefit from including more demographic questions about participants, such as social economic status and ethnicity. This will help with study generalizability and possible further explorations.

Further research is needed to assess the role that sibling aggression has on an individual’s well-being. No research has been done to connect the concept of trauma and sibling aggression. With trauma research becoming more apparent, the role sibling aggression plays should be addressed. Sibling aggression could be deemed a trauma factor. This could be why sibling aggression has such negative implications on the well-being of children. Further research is needed to examine this.
References


Krienert, J. L., & Walsh, J. A. (2011). My brother’s keeper: A contemporary examination of reported sibling violence using national level data, 200-


TITLE OF STUDY
Exploring Sibling Aggression

PRINCIPAL INVESTIGATOR
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Arcata CA, 95521
(760) 605-1274
kph7@humboldt.edu

PURPOSE OF STUDY
You are being asked to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information.

The purpose of this study is to see how often sibling aggression occurs. You must be at least 18 years of age to participate.

STUDY PROCEDURES
There are two parts to this questionnaire. The first is the Demographics, which consists of 10 questions. This part assesses simple demographic information. Next is the Scale of Negative Family Interactions, which consists of 34 questions. This part asks about your past experiences with your siblings. This survey will take approximately 15 to 30 minutes to complete with time varying depending on speed of reading and time taken to consider questions.

RISKS
Because the content in the questionnaires are not distressing for participants, the potential risks is minimal to none. You may decline to answer any or all questions and you may terminate your involvement at any time if you choose.

BENEFITS
This research has benefits for the individual participants and society. Participants look into their personal experiences with their siblings. The public will benefit from getting more information about how often sibling aggression occurs.
CONFIDENTIALITY
Your responses to Exploring Sibling Aggression survey will be anonymous. Please do not put any identifying information on this survey. Every effort will be made by the researcher to preserve your confidentiality.

CONTACT INFORMATION
If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher whose contact information is provided on the first page.
You may also contact Christopher Aberson at cla18@humboldt.edu or (707) 826-3670.
If you have questions about your rights as a participant, report them to the Humboldt State University Dean of Research, Dr. Rhea Williamson, at Rhea.Williamson@humboldt.edu or (707) 826-5169.
If you have any concerns with this study, contact the Chair of the Institutional Review Board for the Protection of Human Subjects, Dr. Ethan Gahtan, at eg51@humboldt.edu or (707) 826-4545

VOLUNTARY PARTICIPATION
Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to select a box saying you consent. Even after checking the box giving your consent, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

CONSENT
I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I voluntarily agree to take part in this study. If you understand this information and agree to participate in the survey please click the "I agree" button below.
Appendix B

Demographics

How old are you?

Are you an only child?

Are you a twin?

Please check which applies to you

1. Male
2. Female
3. Other

Siblings refer to all biological, adoptive, foster, half, or stepsiblings, or any child and/or adolescent who lived with your family.

1. How many siblings do you have?
2. How many siblings did you grow up with in the home?
3. How many of each do you have? Please indicate
   Older sister ______
   Older brother ______
   Younger sister ______
   Younger brother ______
4. When did sibling conflict/sibling rivalry/sibling aggression occur the most frequently?
   Ages:
   0 yrs. to 5
   5 yrs. to 9
   9 yrs. to 11
   12 yrs. to 15
   15 yrs. to 18 yrs.
   Adult +
5. Which sibling did you have the most frequent sibling conflicts/sibling rivalry/sibling aggression with?
   Older brother
   Younger brother
Older sister
Younger sister
6. How many years apart are you and that sibling?
   1  2  3  4  5  6  7  8  9+
Appendix C

Scale of Negative Family Interactions
Any time during childhood or adolescence
Indicate how often the members in your family of origin engaged in the following behaviors by circling the appropriate number, according to the above scores. Sisters and brothers refer to all biological, adoptive, foster, half, or stepsiblings, or any child and/or adolescent who lived with your family. If you have more than one sister or brother in the same category (e.g., two older sisters), your answer should reflect the greatest amount any sister, or brother engaged in the behavior.

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Older Sister</th>
<th>Younger Sister</th>
<th>Older Brother</th>
<th>Younger Brother</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Made fun of you in a hurtful way.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>2. Screamed at you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>3. Swore or cursed at you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>4. Ignored you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>5. Treated you like you were stupid.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>6. Said things to hurt you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>7. Made threatening gestures.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>8. Threatened to harm you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>9. Intentionally locked you out of your home.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>10. Spanked you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>11. Pushed, shoved, or pulled you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>12. Shook you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>13. Threw a hard object at you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>14. Hit you with an object.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>15. Hit you with a fist and/or punched you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>16. Slapped you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>17. Kicked you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>18. Scratched and/or pinched you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>19. Pulled your hair.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>20. Bit you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>21. Beat you up and/or hit you</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>22.</td>
<td>Threw you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>23.</td>
<td>Tried to smother or tried to choke you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>24.</td>
<td>Threatened you with, or used, a knife, gun, or sharp object.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
</tbody>
</table>

When responding for siblings, the following refer to behaviors done against your will and not during mutual sex play and/or exploration.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25.</td>
<td>Made sexual comments about you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>26.</td>
<td>Had you expose yourself to him or her.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>27.</td>
<td>Intentionally exposed himself or herself to you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>28.</td>
<td>Had you watch the sexual activity of others (includes videotapes).</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>29.</td>
<td>Touched you in a sexual way.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>30.</td>
<td>Had you touch him and/or her in a sexual way.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>31.</td>
<td>Had you engage in sexual activity with another person(s).</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>32.</td>
<td>Engaged you in oral sexual contact.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>33.</td>
<td>Attempted anal or vaginal sex with you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
<tr>
<td>34.</td>
<td>Had anal or vaginal sex with you.</td>
<td>0123</td>
<td>0123</td>
<td>0123</td>
</tr>
</tbody>
</table>
Appendix D

What was your location for majority of your childhood? City and state

Where do you currently live? City and state

Please check your highest level of education

a. Some high school
b. GED
c. High school diploma
d. Some college
e. Associate’s Degree
f. Bachelor’s Degree
g. Master’s Degree
h. Doctorate