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## The Effect of Family Structure and Mental Health on Childhood Bullying Behaviors

Undergraduate Honors Thesis

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## The Effect of Family Structure and Mental Health on Childhood Bullying Behaviors Bullying

Bullying has been defined in a number of different ways. It is a specific, repeated type of aggression that occurs between at least two people, which is used by one party to intimidate or control the other. The defining features of the definition by the Centers for Disease Control (CDC) are any unwanted aggressive behavior(s) that involves an observed or perceived power imbalance and is or is likely to be repeated multiple times. These behaviors may inflict harm or distress on the targeted person including physical, psychological, social, or educational harm (National Center for Injury Prevention and Control, 2019). This definition highlights the unwanted aspect of bullying behavior, which is crucial in the manifestation of bullying behavior.

Verbal types of bullying, while the most common form, are not the only form of bullying behavior exhibited. Bullying is the systematic use of physical and/or mental violence where one person chronically harasses somebody else either physically or psychologically (Olweus, 1991). This definition of bullying highlights the two different aspects of the behavior: the physical and mental, both of which can be extremely damaging Some bully others to try to maintain social dominance through aggressive means because the victims lack the sufficient skills or capacity to integrate with their peers (Arora & Thompson, 1987).

Social dominance and power are key motivating factors in the development of bullying behaviors. Bullying is a type of aggression characterized by a repeated and systematic abuse of power (Cook et al., 2010). Other definitions highlight the power dynamics between the two parties involved in bullying behavior. The victim is in some way or another incapable of defending themselves against the perpetrator, which is often the reason why a particular individual is chosen as the target in the first place (Salmivalli et al., 1999).

The previous research examining bullying highlights themes of aggression, power imbalance, and both physical and psychological aspects of behavior. With these themes in mind, the current study defines bullying as, "when student(s) say or do nasty things to one another, when student(s) are teased repeatedly in a way they do not like, or when they are deliberately left out of things" (Iannotti, 2009-2010). How bullying is defined affects how it is measured and operationalized in addition to how children themselves report bullying, which indicates a need for as comprehensive of a definition as possible. While most studies and programs utilize definitions that are similar to one another, these definitions can have their individual nuisances when looking from one study to another. Some definitions include specific aspects of bullying, while others do not, and there are different ways in which bullying can be implemented which may or may not be included in the definition. Depending on how the definition is presented to children and adolescents can influence whether the child perceives actions as bullying, and can additionally influence the amount of bullying that is reported. This leads to the importance of understanding and being aware of bullying, its prevalence, and its aspects.

#### Prevalence

Bullying is a complex phenomenon. Despite its prevalence, there is still a great deal that is unknown. However, these prevalence rates may not be accurate or may not report the same statistics due to the varying definitions, measurements, and classification criteria that are used to measure bullying behaviors amongst children. Current prevalence rates indicate that one out of every five children is bullied in some capacity and every seven seconds a child is a victim of bullying behavior (National Center for Injury Prevention and Control, 2019; STOMP Out Bullying, 2020). Forty-three percent of children who are bullied, dependent on age group, report having been bullied through the use of technology. Approximately five and a half million students skip school per year due to some form of bullying behavior.

Research suggests that 10-30% of children and adolescents were involved in bullying behavior (Cook et al. 2010; Mitsopoulou & Giovazolias 2015). Males report bullying more regardless of what grade they are in (Bosworth et. al., 1999). Only 19% of students reported that they had not engaged in bullying behavior in the past 30 days. The distribution of bullying perpetration ranged from infrequent participation in bullying behaviors (9.1%) to frequent involvement (7.7%) during this 30-day time period. Approximately 15-30% of students bully others, are victims of bullying, or are both, with at least 10% reporting chronic bullying and 20% bullying others (Golmaryami et al., 2016; Berthold & Hoover, 2000). Worldwide bullying, which includes both bullying perpetrators and victims, has affected 8-50% of children, including 30% within the USA (Zimmerman et. al., 2005).

#### Perpetration

Bullying is practiced in several different ways and does not take place in a vacuum. Each bullying interaction has an outlet, which is manifested in the victim. Of those who participate in bullying behaviors, there are several different participant roles (Salmivalli et. al., 1999). These roles include specific types of behavior: the active-aggressive (bullying) role, the passive or follower-like aggressive role that consists of assisting or reinforcing the bully, the prosocial role of defending the victim, and the withdrawing role of staying outside of the situation.

Another way to perform bullying behavior is either by direct or indirect aggression.

Direct aggression is done face-to-face, while indirect aggression is not done through in-person contact, but still causes substantial harm. Direct aggression is more common in the physical form with 11-12-year-old boys than in girls, but direct verbal aggression has no sex differences.

Indirect aggression is more typical among females (Rivers & Smith, 1994). Using indirect aggression is an indicator of maturation and "manipulation of a fully developed social

infrastructure" (Bjorkqvist et al., 1992). Research by Bjorkqvist et al. examined both males and females ages 8, 11, and 15 years old, where they found that indirect aggression manifested in females as early as age 8. They also found that while indirect aggression manifests this early, it does not fully develop as an alternative to direct forms of aggression until age 11, where it peaks.

Bullying behavior can take different forms as well, some of which include reactive and proactive aggression. Reactive aggression involves volatile anger towards another, while proactive aggression is the use of aggressive acts to meet some kind of goal that may not involve anger by the perpetrator. The use of anger is an important difference between these two types of aggression (Bosworth et. al., 1999).

Children bully for several different reasons. Some bully to satisfy some urge, some to be an outlet for anger, and some for other reasons. Early cognitive stimulation, emotional support, and exposure to television have been linked to an increased likelihood of bullying behaviors in grade school (Zimmerman et al., 2005). Other reasons children bully include needing to belong, social status, levels of power, family dynamics, aspects concerning the victim themselves, and the disinhibition effect (Wilton & Campbell, 2011). Children may also bully due to familial influence such that those who bully others are more likely to have experienced some kind of parental power imbalance, typically by the father (Stevens et al., 2008). When looking at the families of male perpetrators of bullying especially, these families enforce rules that encourage aggressive behavior and communication styles are often inadequate (Riclan, Klicperrova, & Koucka, 1993; Rigby, 1994).

#### Victimization/Witnesses

Bullying has a profound effect on the children that are involved, regardless of their degree of involvement. Bullying has long-lasting effects on those who are bullied, those who bully others,

and even bystanders that witness bullying behavior take place (U.S. Department of Health and Human Services, 2017). Children who are bullied experience social, physical, and mental health issues. These children are more likely to experience depression, anxiety, sadness, loneliness, changes in sleep and eating patterns, and a loss of interest in things that they used to enjoy. Those who are victimized are also more likely to experience health complaints as well as decreased academic achievement and school participation, as evidenced by GPA, standardized test scores, truancy, and drop-out rates (U.S. Department of Health and Human Services, 2017; STOMP Out Bullying, 2020). Additionally, children who are bullied may sometimes retaliate in extremely violent ways. In a sample of 15 school shooting cases, 12 of the shooters involved had a history of being a victim of bullying behavior (U.S. Department of Health and Human Services, 2017).

While the effects of bullying are concentrated mainly around the active participants, even bystanders who witness bullying behavior take place have been shown to experience negative effects. Children who witness bullying have been shown to have increased use of alcohol and other drugs, increased mental health issues (particularly increased depression and anxiety) and are more likely to engage in truancy (U.S. Department of Health and Human Services, 2017).

#### **Impacts**

The research on the effects of bullying behavior is quite extensive. The problems that appear in childhood tend to prevail into adulthood and even manifest in new, more severe ways. Children who were victims of bullying have been consistently found to be at higher risk for internalizing problems, especially the diagnosis of anxiety disorders and depression in young adulthood and middle adulthood, from around 18–50 years of age (Wolke & Lereya, 2015). They report that victims are at increased risk for displaying psychotic experiences at 18 and having suicidal ideation, attempts, and completed suicide. Victims also have poorer general health that

manifested as more bodily pain, headaches, and a longer time spent recovering from illnesses. Victims also reported having more trouble making and keeping friends, less likely to live with a partner, and less likely to have social support of various kinds. Bullying also impacts scholastic performance. Children who have experienced bullying behavior tend to have poorer performance in school when compared to their peers, they have increased mental health problems such as anxiety, depression, and loss of interest, and they tend to have more health problems (U.S. Department of Health and Human Services, 2017).

Perpetrators of bullying demonstrate poorer psychosocial and psychoeducational adjustment when compared to control groups (Edwards, 2015). Bullying has an unwanted, negative, wide-spread, and continuous impact on children's psychosocial functioning and emotional development on both those who bully others and those who are bullied by others. Those who bully others may perceive that they experience less support from parents and teachers, which may exacerbate the challenges and risks of perpetrating bullying behavior. Additionally, approximately 60% of boys who were bullying perpetrators during their early teenage years had at least one criminal conviction by the age of 24 (STOMP Out Bullying, 2020). Children who are the perpetrators of bullying experience negative effects and tend to engage in violent or risk-taking behavior. Those who bully are more likely to abuse drugs and alcohol, get into physical fights, deface property, drop out of school, engage in sexual behavior earlier in life, have criminal convictions and traffic citations, and be abusive towards partners and family in their adult years (U.S. Department of Health and Human Services, 2017). Research indicates that those who bully others were not found to be at an increased risk for mental or general health issues (Wolke & Leyera, 2015). Perpetrators were also found to be emotionally and physically healthier than their peers, more deviant, and less likely to be educated and

employed. Additionally, these persons are more likely to display antisocial behavior, as well as to be charged with a serious crime, burglary, or illegal drug use.

#### Life Satisfaction

Life satisfaction predicts participation in and victimization by bullying behaviors (Varela, et. al., 2019). There is evidence to suggest that life satisfaction has a mediating effect on the relation between perceived community support and peer victimization in adolescents. If the victims of bullying feel less community support, the negative consequences of bullying behavior can be even higher compared to those who do feel supported by their communities. Life satisfaction can be influenced by emotional, social and behavioral variables. School experiences can significantly impact children's reports of life satisfaction as well (Edwards & Ray, 2008).

#### Custodial Grandchildren

There are specific groups of children who are at a higher risk than others to engage in bullying behaviors either as a victim, perpetrator, or both. One of these groups is "custodial grandchildren," or children who are raised by their grandparents. Grandfamilies are typically formed in times of crisis that result in the loss of or estrangement from their respective parental caregiver(s) (Edwards, 2016). The family crises that lead to the assumption of parenting roles by grandparents are best summarized as the "nine D's" of custodial grandparenting: Divorce, Desertion, Drugs (resulting in child neglect/abuse), Death, Diseases, Delivery (adolescent childbirth), Detention (incarceration), Deployment (military), and Departure (immigration) (Edwards & Benson, 2010).

Grandfamilies are extremely prevalent within the U.S. The number of children living in homes with their grandparents has increased as much as 40% over the last twenty years (Edwards, 2016). Of the 7.8 million children who live with their grandparents, 3.6 million are

considered to be the sole custodial responsibility of the grandparent. As of 2009, 6 million children lived under the care of a grandparent while the parents lived in the home, 3.6 million had the grandparent as the primary caregiver, and 1.8 million children were living in a home with no parent present (Edwards, 2015). Children living with their grandparents make up 9% of the children living in the United States.

In addition to this prevalence, these arrangements tend to be long-lasting, as well. Among a survey of 3,477 grandparents, approximately 11% indicated that they had raised a grandchild for at least six months (Fuller-Thomson, Minkler, & Driver, 1997). Fifty-six percent of these grandparents raising grandchildren had cared for them at least three years. The majority of these grandchildren also began living with their grandparents when they were younger than five years old.

### Bullying Behaviors Among Custodial Grandchildren

According to a study done by Edwards (2015), Children who are raised by their grandparents experience more bullying involvement than their peers. This involves heightened levels of bullying in those who are perpetrators, but not heightened victimization among custodial grandchildren. The study found that children who are raised by their grandparents are more difficult to raise than their peers, potentially due to the circumstances surrounding their placement into the care of their grandparent(s). Additionally, children living in these alternative families may be predisposed to experience risk factors associated with being the perpetrator of bullying. Supporting this, children from grandparent-headed households are more likely to participate in bullying than children raised by parents, with no significant differences in victimization (Edwards, 2015).

Bramlett and Blumberg (2015) found that children in grandparent-only families have the poorest health status of any group of children, regardless of caregiver type. Custodial grandchildren are at an increased risk for health problems; attentional issues; difficulties with emotions, concentration, behavior, and relational interactions; and the development of behavioral and emotional issues requiring treatment or counseling. For example, children whose parents died, abused drugs or alcohol, or were incarcerated might experience psychological distress, or there could have been child abuse/neglect in the family of origin. Less supportive home environments are associated with increased behavior problems and are consistent with other study findings of children with foster care as well as in the general population (Kelley et al., 2011).

There are two major reasons why custodial grandchildren may encounter a greater risk of behavioral and emotional difficulties than children in general (Smith & Palmieri, 2007). First, custodial grandchildren typically receive care from grandparents due to parental substance abuse, child abuse and neglect, teenage pregnancy, death, illness, divorce, incarceration, and HIV-AIDS (Edwards & Benson, 2010). These circumstances may increase the risk of psychopathology among custodial grandchildren, including potential exposure to prenatal toxins, childhood trauma, inadequate interaction with their parents, family conflict, uncertainty about their future, and stigma from society (Smith, Savage-Stevens, & Fabian, 2002). Secondly, custodial grandchildren may experience a higher risk of emotional and behavioral difficulties resulting from the numerous challenges that grandparents face as caregivers.

As a result of these stressors and life circumstances, grandchildren raised by grandparents are at an increased risk for behavioral, psychological, emotional, and academic problems in school (Edwards, 2015). Regardless of the grandchild's behavior, the grandparental wellbeing is impacted in either a positive or, as is more frequently indicated, negative way. This is a

reciprocal relationship in that grandparents may also impact the well-being of their grandchildren, as evidenced by an increased prevalence of internalizing and externalizing problems than their non-custodial peers. A study by Kelley et al. (2011) found that among custodial grandchildren, almost one third have clinically elevated behavior problem scores. This is not unexpected considering the vast majority have experienced multiple adverse events before living with their grandparent, such as child maltreatment, abandonment, or the incarceration of one or both parents. Children raised by grandmothers typically experience a disruption in attachment relationships with their birth parents, placing them at increased risk for emotional distress (Kelley et al., 2011).

#### Custodial Grandchildren and Life Satisfaction

Often, research involving custodial grandchildren focuses on the challenges experienced in families where children are raised by their grandparents (Edwards & Ray, 2008). Scholars have suggested that greater attention should be directed to the study of psychological well-being rather than the current disproportionate emphasis on psychopathology. One important component of children's strength is their quality of life, which is often regarded as subjective well-being, and is comprised of life satisfaction as well as affective states such as positive or pejorative feelings and moods (Edwards & Ray, 2008). Life satisfaction also has implications for the school experience of children raised by their grandparents.

#### Current Study

The purpose of this study is to evaluate the effects of grandfamily structure on bullying behavior in children. The moderating effects of grandparents on mental health & bullying behavior, as well as their effects on bullying behavior and life satisfaction, will additionally be examined. We hypothesize that, based on prior work done by Edwards (1) there will be a

significantly higher rate of bullying behavior (both perpetrator (H1A) and victim (H1B)) amongst children raised by their grandparents than those raised without grandparents present. We also hypothesize that (2) children raised by their grandparents will report poorer mental health overall (H2A) and lower levels of life satisfaction (H2B) than those raised by their parents without a grandparent present, and that (3) higher rates of bullying (both perpetrator and victim) will be associated with both poorer mental health and lower life satisfaction. Based upon the additive effects of hypotheses 1-3, it is hypothesized that (4) caregiver type will moderate the relation between bullying behavior (both perpetrator (H4A) and victim (H4B)) and mental health. Also, based upon these same additive effects of hypotheses 1-3, it is hypothesized that (5) caregiver type will moderate the relation between bullying behavior (both perpetrator (H5A) and victim (H5B)) and life satisfaction. Through answering these questions, we will be able to more fully understand the impact that custodial grandparenting has on adolescents and their bullying behaviors.

#### Method

#### **Participants**

The participants in this study were taken from the Health Behavior in School-Aged Children (HBSC) dataset (Iannotti, 2009-2010). The purpose of the HBSC data was to develop health promotion and education initiatives for children, which are meant to help create programs at the local, state, and national level. The study also aimed to gain understanding of the health behavior and lifestyles of these young people, while informing and influencing health promotion and education. The total number of students involved in our sample was 12,181. The participants ranged from 10 to 17 years of age (M = 12.95, SD = 1.742). Within the sample, 51.1% identified as male and 48.9% identified as female. Regarding grade in school, 13.3% of participants were in fifth grade, 16.1% in sixth grade, 19.3% in seventh grade, 19.8% in eighth grade, 16.3% in

ninth grade, and 15.1% in tenth grade. Regarding racial and ethnic categorizations, 47.2% of the sample indicated that they were Caucasian, 16.8% indicated that they were African American, and 19.0% indicated that they were Hispanic. The remaining 17% of the sample population identified as "other" or did not indicate their race.

#### Procedure

The HBSC used self-report questionnaires administered to students in grades 5-10 across 314 different schools. The surveys were administered via either paper or the internet, and asked questions concerning nutrition, physical activity, violence, bullying, relationships with family and friends, perceptions of school as a supportive environment, and alcohol, tobacco, marijuana, and other drug use (Iannotti, 2009-2010).

#### Measures

Bullying Behavior: Within the Health Behavior and School Age Children (HBSC) dataset, bullying behaviors occur when student(s) say or do nasty things to one another, when student(s) are teased repeatedly in a way they do not like, or when they are deliberately left out of things (Iannotti, 2009-2010). Bullying behavior was measured using the HBSC Bullying Measure, which was created by the HBSC researchers and used internationally in more than 49 countries over 30 years this measure was intended to measure bullying behavior both as the perpetrator and as the victim. All questions were measured via a 5-point Likert scale, with higher responses meaning more frequent bullying behaviors. The questions ask several different aspects of how one can be bullied, including an overall question of the frequency of being bullied at school and then specific aspects of this bullying. These are: being called names/teased, being left out of things, being hit/kicked/pushed, others lied about me, for race, for religion, making sexual jokes, using a computer and using a cell phone, both in and outside of school. These questions were asked the same way for one having been bullied and being the one who bullies others. The measure defines being bullied as when another student, or group of students, say or do

unpleasant things to another, tease repeatedly, or deliberately leaves someone out. All of these behaviors are defined as being unwanted by the victim. The measures for bullying, both for perpetration and victimization, in the HBSC dataset demonstrate structural validity (Roberson & Renshaw, 2018). According to Roberson and Renshaw, no adjustments should be made to this measure if one is measuring bullying behaviors among 5-10<sup>th</sup> grade students, and if accessing populations at risk for bullying involvement. The HBSC measure is conceptually broad and balanced. Our perpetration scale had an internal consistency of  $\alpha = .94$ , and our victimization scale had an internal consistency of  $\alpha = .90$ .

Mental Health: Adolescents' mental health was measured using a modified version of the KIDSCREEN-10, which is intended to provide a global assessment of physical, psychological, and social health (Ravens-Sieberer et al., 2010). The KIDSCREEN-10 has demonstrated both reliability and validity, similar to that of the KIDSCREEN-27 and KIDSCREEN-52. Research found good internal consistency even with small sample sizes, and the measure can be useful in large-scale studies such as that of the HBSC (Ravens-Sieberer et al., 2010). Within this project, only those questions assessing mental health symptoms were used. These included the frequency of feeling low, irritability, feeling nervous, and difficulties sleeping over the last six months. These were measured on a Likert scale with responses ranging from 1-5, with 5 indicating better mental health and a response of a 1 indicating lower mental health. Two additional questions asked about mental health, using a timeframe of "over the past week" as opposed to the past six months: feeling sad and feeling lonely. These two questions were reverse-coded using a Likert scale, so that a response of 1 indicated worse mental health and a response of 5 indicated better mental health. The six mental health questions were then summed. Our scale had an internal consistency of  $\alpha = 0.77$ . This alpha is considered low, but within acceptable range (Taber, 2018).

Life Satisfaction: Life satisfaction refers to individual perceptions of happiness relative to their overall life. Satisfaction with life was measured using a modified version of the Cantril Ladder, a measure of global satisfaction designed for adolescents (Levin & Currie, 2014). This measure has shown good reliability and convergent validity among other measures of subjective well-being. This research found that the Cantril Ladder is specifically reliable and valid when looking at children ages 11-15 years old, which corresponds with the age range of our study. The measure gives the survey-takers a picture of a ladder and asks them to picture where they stand on the ladder, with a response of a 10 representing the best possible life and that of a 1 indicating the worst possible life.

#### **Results**

To test Hypothesis 1A, a one-way analysis of variance (ANOVA) was performed to determine if there was a significant effect of caregiver type on likelihood being the perpetrator of bullying behavior. Caregiver type was classified into three groups: Grandparents only (n = 194), Parents only (n = 9758), and Multigenerational families (n = 951). The analysis was statistically significant, F(2, 10900) = 8.204, p < .001 (see Figure 1), indicating that family structure influenced the amount of perpetration of bullying behavior that is performed by a child. Post hoc analysis was performed with a Bonferroni adjustment. Likelihood of perpetrating bullying behavior was significantly greater in the Grandparents Only group versus the Parents Only group (mean difference of 1.641 (95% CI, 15.814 to 14.174), p < .001) and the Multigenerational group (mean difference of 1.410 (95% CI, 15.814 to 14.405), p < .01).

For Hypothesis 1B, a one-way analysis of variance (ANOVA) was performed to determine if there is a significantly higher rate of being the victim of bullying behavior amongst children raised by their grandparents than those raised without grandparents present. Caregiver type was classified into three groups: Grandparents only (n = 195), Parents only (n = 9741), and

Multigenerational families (n = 955). The analysis was statistically significant, F(2, 10888) = 7.925, p < .001 (see Figure 2), indicating that family structure influenced the amount of a child being the victim of bullying behavior. Post hoc analysis was performed with a Bonferroni adjustment. Likelihood of being the victim of bullying behavior was significantly greater in the Grandparents only group verses the Parents Only group (mean difference of 1.743 (95% CI, 17.308 to 15.565), p = .001) and the Multigenerational group (mean difference of 1.308 (95% CI, 17.308 to 16.000), p = .041).

A one-way analysis of variance (ANOVA) was performed to determine Hypothesis 2A, if there is a significantly higher rate of mental health issues amongst children raised by their grandparents than those raised without grandparents present. Caregiver type was classified into three groups: Grandparents only (n = 206), Parents only (n = 9722), and Multigenerational families (n = 959). The analysis was statistically significant, F(2, 10884) = 5.424, p = .004 (see Figure 3), indicating that family structure influenced the amount of mental health issues a child experiences. Post hoc analysis was performed with a Bonferroni adjustment. Lower mental health was significantly greater in the Grandparents only group verses the Parents Only group (mean difference of 1.359 (95% CI, 25.418 to 26.777), p = .003) and the Multigenerational group (mean difference of 1.288 (95% CI, 25.418 to 26.706), p = .013).

A one-way analysis of variance (ANOVA) was performed to determine Hypothesis 2B, if there is a significantly higher rate of life satisfaction was found amongst children raised by their grandparents than those raised without grandparents present. Caregiver Type was classified into three groups: Grandparents only (n = 233), Parents only (n = 10687), and Multigenerational families (n = 1080). The analysis was statistically significant, F(2, 11997) = 5.784, p = .003 (see Figure 4), indicating that family structure influenced the amount of life satisfaction a child experiences. Post hoc analysis was performed with a Bonferroni adjustment. Life satisfaction

was significantly lower in the Grandparents only group verses the Parents Only group (mean difference of 0.370 (95% CI, 7.150 to 7.520), p = .016), but life satisfaction was not significantly lower than the Multigenerational group (mean difference of 0.240 (95% CI, 7.150 to 7.390), p = .143).

Hypothesis 3 was tested using Pearson's product-moment correlations on the variables of likelihood of perpetrating bullying acts, likelihood of being the victim of bullying acts, life satisfaction, caregiver type, and mental health. All variables were significantly correlated, and results can be seen in Table 1.

H4A: Moderation of caregiver type on the relation between being a perpetrator of bullying and mental health was tested using Model 1 of SPSS' Process Macro. A nonsignificant interaction was found (t = 1.15, p = .25), indicating that caregiver type does not moderate this relation.

H4B: Moderation of caregiver type on the relation between likelihood of being the victim of bullying and mental health was tested using Model 1 of SPSS' Process Macro. A nonsignificant interaction was found (t = 0.14, p = .89), indicating that caregiver type does not moderate this relation.

H5A: Moderation of caregiver type on the relation between likelihood of being a perpetrator of bullying acts and life satisfaction was tested using Model 1 of SPSS' Process Macro. A significant interaction was found (t= -2.82, p < .01) (see Figure 5), indicating that caregiver type does moderate this relation. Looking at the conditional effects, likelihood of perpetrating bullying acts was significantly negatively correlated with life satisfaction for the Parents Only households (t = -8.31, p < .001), but not within the Grandparents households (t = -1.46, p = .14).

H5B: Moderation of caregiver type on the relation between likelihood of being the victim of bullying acts and life satisfaction was tested using Model 1 of SPSS' Process Macro. A nonsignificant interaction was found (t = -.47, p = .64), indicating that bullying victimization does not moderate this relation.

#### **Discussion**

The predictions that there would be significantly higher rates of bullying victimization and perpetration amongst children raised by their grandparents than those raised without grandparents present were supported. Children who live with their grandparents had higher rates of bullying behavior, concerning both victimization and perpetration, than those who were in multigenerational households and those who lived with their parents only. These findings are consistent with previous research done on the HBSC dataset that examined bullying behaviors in custodial grandchildren (Edwards, 2015; Edwards 2016). These studies saw an increase in bullying perpetration, but our results also found an increase in victimization among these custodial grandchildren. The increased levels of bullying behaviors in the grandparent-only group indicate that there are significant implications of caregiver type on children's likelihood of engaging in bullying. This could be due to the circumstances that led to the child being brought into the care of the grandparent and the repercussions that stem from the separation of the child from the parent generation. As noted, some reasons that children are placed in the care of grandparents are the Nine D's of custodial grandparenting, which involves physical or emotional separation from the parent (Edwards & Benson, 2010). This can have negative emotional and psychological impacts not only on the child, but on the grandparent as well (Lent and Otto, 2018; Hayslip & Kaminski, 2005). These results suggest that the degree of separation from the parental generation may impact the amount of bullying in which a child is involved, which supports the

idea that the circumstances that lead to being placed in a grandparent's home have an impact on the child's behavior.

The predictions that children raised by their grandparents will report poorer mental health overall, and lower levels of life satisfaction, than those raised by their parents without a grandparent present was supported. Children raised by their grandparents reported poorer mental health and lower life satisfaction overall when compared to both multigenerational and parent-only households. This may be due in part to the various reasons children may have been placed in the grandparent's home. Being raised in a home with an absent parent or a parent who does not provide the proper amount of care for their child can have negative outcomes on the mental health of the children. The environment in which a child is brought up in has an impact on their psychological health, whether this be positive or negative (Halpern & Figueiras, 2004).

Children who were raised in a home with both parents present had better mental health and higher levels of life satisfaction than multigenerational households and grandparent-headed households, respectively. Based on these results, we can reasonably conclude that the presence of the parents in the household may positively impact the amount of satisfaction and the presence of mental health experienced in children. As seen when examining bullying behaviors manifested in children in various caregiver household arrangements, these results support the idea that the circumstances that lead to being placed in a grandparent's home have a substantial impact on the internal well-being of children.

The predictions that higher rates of bullying perpetration and victimization would be associated with both poorer mental health and lower life satisfaction were supported. All variables were significantly correlated with one another, indicating that there is a significant relationship between all variables examined. Bullying victimization was significantly correlated with being the perpetrator of bullying, which indicated that there is a two-way relationship

between these behaviors. Being the recipient of the aggressive behavior, whether verbal or physical, can cause the child to then exhibit the same behaviors, or vice versa. There is various research that supports the idea that those who bully others can also be victims (Cook et al., 2010; Swearer et al., 2001). This may be an example of modeling, where the victim of bullying displays behaviors that they see exhibited by others towards them, therefore causing them to also be a perpetrator of bullying behavior.

Bullying perpetration and victimization were both negatively correlated with life satisfaction and mental health, indicating that the more one is involved in bullying behaviors the worse their mental health and self-perception of life is (and vice versa). This suggests that being involved in bullying behaviors has a significant negative impact on one's mental health and self-perception of satisfaction, or inversely that having worse mental health overall and lower levels of life satisfaction predisposes one to engage in bullying behaviors.

The hypothesis that caregiver type would moderate the relation between bullying behavior perpetration and victimization and mental health was not supported. Results indicated that caregiver types does not significantly affect the relation between bullying behaviors (victimization and perpetration separately) and mental health. This indicates that the quality of adolescents' mental health or life satisfaction in correlation to how much bullying behavior they exhibit is not regulated by their caregiver type. This might be due to our modified measure for mental health, as it may have not been comprehensive enough. Our measure did not measure all potential symptoms of mental health problems, nor did it measure for specific mental health problems. Future studies are urged to utilize a standardized, comprehensive measure for mental health.

The hypothesis concerning the moderating effect of caregiver type on the relation between life satisfaction and whether the child is the perpetrator of bullying behavior was supported. There was a significant negative association between frequency of being the perpetrator of bullying behaviors and reported life satisfaction for children raised in homes headed only by parents, but no association present in homes headed by only grandparents or multi-generational homes. The research examined concerning bullying perpetration in grandkin suggested that being in a grandparent-headed household should have a greater effect than that in parent-only households (Edwards, 2015; Edwards 2016; Smith & Palmieri, 2007). However, this result does not contradict research in rates of bullying behavior or life satisfaction for grandkin, as multigenerational and grandparent-only families still reported overall lower levels of life satisfaction and higher levels of bullying perpetration, as seen in Figure 5.

#### *Implications*

There are several implications of these results that are applicable to the development of bullying prevention interventions. These results indicate that custodial grandchildren who engage in more frequent bullying behavior, have more prevalent mental health problems, and experience less life satisfaction than those raised by their parents. This may inform improved grandparenting practices, as well as how community and health providers should respond to children and grandparents in these scenarios.

When children are removed from the care of their parents, the situation they are leaving is typically a compromised one, with the severity varying on a case by case basis. When children are in negative environments for prolonged periods of time, it can impact them psychologically and socially. Custodial grandchildren tend to feel as though they are not wanted or have been abandoned by their parent, they feel as though they are a burden to their grandparent(s) who may not have anticipated having to care for the grandchild, or they might have a sense of anxiety over the idea of being placed back in the care of their parent, all of which can have negative psychological effects on the child in question (Bratton, Ray, & Moffit, 1998). These children are

at a higher risk to develop psychological problems than their peers due to the negative environment they were exposed to while in the home of their parent(s) (Kelley et al., 2011; Smith & Palmieri, 2007). These children tend to have more problems at school than other children, have more behavioral problems as a whole, and tend to have a harder time interacting with others (Bramlett & Bloomberg, 2015; Edwards, 2015; Kelley et al., 2011; Smith & Palmieri, 2007). Custodial grandchildren are at a higher risk of being negatively affected and impacted by the scenarios that lead to them being placed in the care of their grandparents, and so are in need of additional services.

The grandparents caring for these children are also in need of support. Research states that children who are placed under the care of their grandparents are harder to raise, which would be difficult both psychologically and emotionally on the caregiver in question (Edwards, 2015). This may impact the quality of life for the grandparents, due to increased stress levels which could eventually lead to other health issues if not managed and regulated properly (Di Gessa et al., 2016; Emick & Hayslip, 1999; Grant, 2000; Whitley et al., 2016). Grandparents who take over the care of their grandchildren typically are not prepared nor do they expect it to happen before it actually does, which is a stressful situation for them to be put under (Orb & Davey, 2005). Grandparents need the social support just as much as the children placed under their care do, and they seemingly receive much less of it than their grandchildren and find it much less readily accessible (Hayslip & Kaminski, 2005; Heywood, 1999). The relations between bullying prevention and victimization, mental health, life satisfaction, and caregiver type found within the study indicated the need for additional research and attention on this at-risk population.

#### Limitations

There are limitations to the current study. The majority of the sample was Caucasian, which is a limitation in terms of potential generalizability of the results of this study to other

ethnic groups. The largest ethnic group represented in the sample, those who are Caucasian, was nearly three times as large as the second largest ethnic group represented in this sample, which was the African American ethnic group. The racial breakdown of the study is not directly proportionate to the ethnic and racial breakdown of the United States of America. However, the large sample size aids in making this a more representative sample overall. Also, some participants did not complete the entire survey, which decreased the overall sample size.

When looking at the structure of the households, specifically when looking at those which are multigenerational, there is a potential limitation in measuring the level of responsibility. There is no information provided in the dataset concerning whether the parent or the grandparent is the head of household in these multigenerational family structures. For example, the question of whether the parent(s) and the child moved into the house of the grandparent(s) or vice versa is unknown. This can affect the level of responsibility for the grandchild and can serve as a potential confound, as we are unaware as to who is in control of the household. There are several potential reasons as to why a multigenerational household might be formed.

There are potential confounds in that not all participants were administered the same survey in the same manner. In the HBSC dataset, researchers indicated that different age groups were given slightly different versions of the survey based on age. Some participants were given the survey over a computer while others used pencil and paper surveys. Additionally, this study utilized self-report responses from these children and adolescents, which may not accurately represent behaviors. While research on self-report bullying measures has not demonstrated a lack of validity for self-reports, the validity of such measures have been called into question as students might be tempted to inflate, minimize, or even deny involvement in bullying behaviors (Cornell & Bandyopadhyay, 2009; Felix et al., 2011). Self-report data might also be an tool for

students who would not normally come forward and admit bullying involvement (either that of perpetration or victimization). There are potential benefits and drawbacks to self-report data, but it is still a valuable tool to gather data and access bullying involvement.

Another limitation is the modification of some measures used within the study. A modified version of the KIDSCREEN-12 was utilized to measure mental health. This measure includes 12 items that inquire about symptoms over the past six months, with additional items inquiring about the past week. These additional items may not meet temporal requirements of symptomology to indicate whether a long-term mental health issue may be present. Additionally, the current study was further limited by the single-item nature of life satisfaction. Future studies are recommended to use more comprehensive and cohesive measures of adolescent mental health and life satisfaction.

This dataset is from 2010, which may not be fully representative of the state of society today in 2020 due to the dramatic changes that have occurred in the past decade. With the widespread use of technology and social media, young people are interacting with one another and bullying one another in completely different ways than they were a decade ago. While bullying still remains as an in-person social issue, a big portion of bullying behavior has moved towards the cyber-sector. Cyberbullying, while measured in the bullying variable that was created, would probably be higher in a sample taken in the last year than taken a decade ago.

#### Future Recommendations

It is recommended that future research based on these findings should utilize a representative definition of bullying behavior that includes a general overview of the several different aspects of bullying. A definition recommended by our research on the definitions of bullying might be "an act of aggression, typically repeated, that can be either physical, psychological, or both, which is committed against another person of a typically lower status of

power." Future research should also include newer, more updated national data to see if significant changes in overall levels of bullying behavior, mental health, or life satisfaction exist in this population of children. Additionally, it is recommended that more comprehensive measures of mental health and bullying be used. New studies could also examine the academic performance of these custodial grandchildren and other common childhood outcomes to further explore the effects of being raised by one's grandparents. Due to a majority of bullying taking place within primary/secondary schools, there may be a significant effect on academic performance if these children are being bullied at school. Future research may explore the difference between having just a grandmother present in the home, just a grandfather in the home, or both on children's bullying behaviors, as well as how many other children are present in the home. Do the additive effects of siblings or other children and the corresponding of division of attention impact the results found in the current study? Does having siblings or other young persons in the house have a significant effect on mental health or life satisfaction? There are several different ways in which these results can stimulate further, related studies that can eventually aid understanding and necessary support for these custodial grandfamilies.

#### Conclusion

Grandkin are more likely to experience or engage in bullying behaviors as well as have lower mental health and life satisfaction, according to our results. Research indicates that this negative impact on the health, both psychologically and physically, of grandkin may be due to the circumstances surrounding their removal from the care of their parent(s) (Bramlett & Blumberg, 2007). These results highlight the need to provide grandkin and their grandparents with the resources necessary to adequately transition from their previous home into their new one, and to continue to practice healthy behaviors. Counseling and support groups may be effective interventions to help ensure that this population has what is needs and is able to give

and receive the best quality of care possible. This could lead to better outcomes for grandkin in regard to their behaviors in areas such as bullying, life satisfaction, and mental health.

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Table 1

Variables of Likelihood of Perpetrating Bullying Acts, Likelihood of Being the Victim of Bullying

Acts, Life satisfaction, Caregiver Type, and Mental Health: Correlations and Descriptive

Statistics

		1	2	3	4	5
1.		-				_
	Victimization					
2.	Bullying	.423**	-			
	Perpetration					
3.	Life	175**	080**	-		
	Satisfaction					
4.	Caregiver	.024*	.018	023*	-	
	Type					
5.	Mental Health	314**	149**	.444**	009	

*Note:* \*Correlation is significant at the .05 level; \*\*Correlation is significant at the .01 level

Descriptive Statistics

Variables	1	2	3	4	5	
M	15.69	14.29	7.49	1.20	26.71	
SD	6.84	5.93	2.00	0.59	5.90	

Figure 1

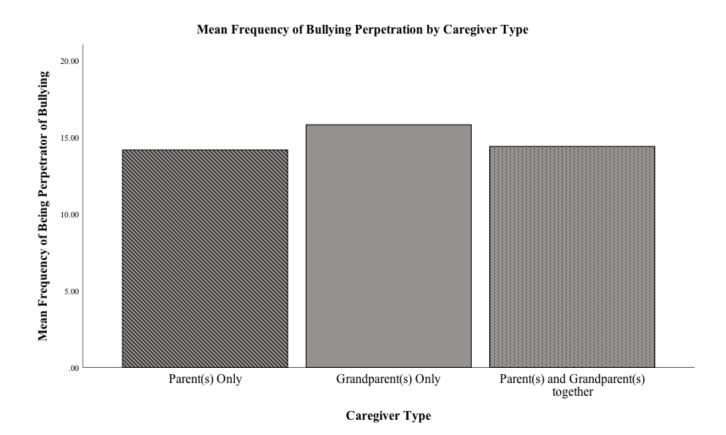
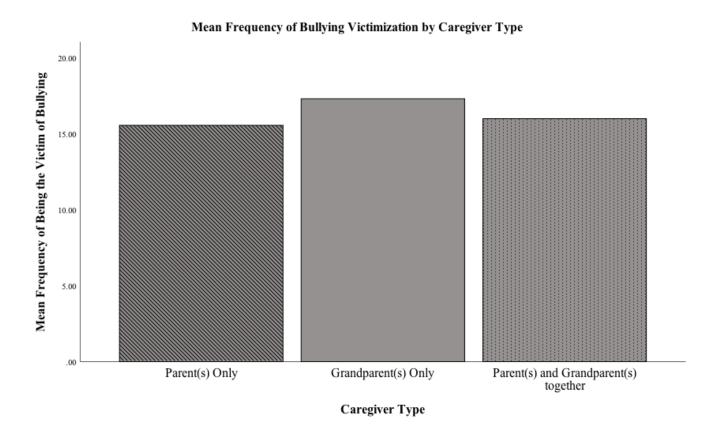


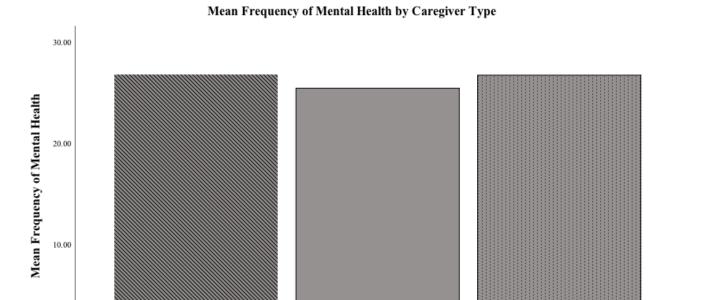
Figure 2



Parent(s) and Grandparent(s) together

Parent(s) Only

Figure 3



Caregiver Type

Grandparent(s) Only

Figure 4

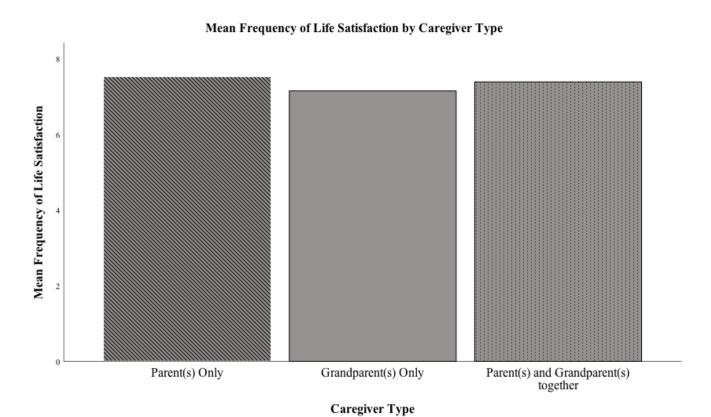


Figure 5

