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Relationship Between Parental Neglect, Socioeconomic Status, and Aggression in Adolescents

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2025

Abstract

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by

Chemarin Eve Boyd

MS, Walden University, 2017

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

Aggressive behavior among adolescents poses significant challenges for families, educators, and communities, often stemming from complex interactions between parental behavior and environmental factors. This quantitative nonexperimental study examined the relationship between parental neglect, socioeconomic status (SES), and adolescent aggression, guided by the parental acceptance-rejection theory. Data were collected from 250 parents of adolescents age 12-18 divided into two groups: those reporting no to low levels of aggression and those reporting moderate to high levels. Binary logistic regression was employed to predict the likelihood of adolescent aggression based on parental neglect (categorical) and SES (scale). The results demonstrated that parental neglect was a significant predictor of adolescent aggression ($B = 3.435$, $p < .001$, $Exp(B) = 31.024$), with neglected adolescents being 31 times more likely to exhibit aggressive behaviors compared to their peers. SES, however, was not found to be a statistically significant predictor ($B = 0.315$, $p = .112$). These findings extend PARTheory's assertion that perceived rejection or neglect by parents is a dominant factor in maladaptive adolescent outcomes such as aggression. The study underscores the need for interventions addressing parental neglect, including parenting education programs, counseling services, and community resources, to mitigate the impact on adolescents.

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Dedication

This work is dedicated to my family. To my parents, who instilled in me the value of education and the strength of perseverance. To my husband, Kevin—your unwavering support and encouragement have been my foundation through every step of this journey. To my children, who inspire me every day to keep learning and growing. And to the community I am privileged to serve, thank you for inspiring me to undertake this study. I hope this accomplishment serves as a reminder that with dedication and support, anything is possible.

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I would like to express my deepest gratitude to my chair and primary advisor, Dr. Eric Hickey. Your expertise, guidance, and patience have been invaluable, and your dark humor has often kept me grounded. Thank you for holding me accountable and lighting the path forward, even when it was at times dim. Onward!

My appreciation extends to my methodologist and committee member, Dr. Reba Glidewell. You have taught me to think outside the box, to find beauty in the little things, and to face challenges without fear. Your mentorship has left an indelible mark on both my research and my outlook.

I am also profoundly grateful for the financial support from the California Department of Rehabilitation. Thank you for your sponsorship and for believing in my dreams and capabilities—it is a privilege to be supported by an organization committed to uplifting and empowering others.

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To my family, my deepest love and appreciation. Mom and Dad, thank you for helping shape me into the person I am today. To my husband, Kevin—thank you for

caring for our little ones while I was immersed in my work, and for always making sure I had coffee and tea at hand. To my children, thank you for your patience and for reminding me to embrace playfulness along the way. And a very special thank you to my son, Jeremiah—your spirit and resilience inspire me every day, and you have taught me to understand and appreciate Autism in ways that make me a better mother and clinician. I am forever grateful for you.

To each and every one of you who has loved and supported me throughout this journey, thank you for helping me reach this milestone. I love you all dearly.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Although previous studies on parenting styles and behaviors, and environmental factors such as culture, peer influence, and socioeconomic (SES) status, have provided insight on the effect of aggressive behavior in adolescents as a single variable, research was needed to identify how these factors together (environmental factors and parental behavior) are associated with adolescent behavior (Chainey & Burke, 2021). Research should consider how parental behavior may affect adolescent behavior, and provide greater understanding of triggers of aggression in adolescents. This study investigated relationship between parental neglect, SES, and aggressive behavior in adolescents. The study considered what previous research had suggested to be common variables associated with adolescent aggression, breaking each down to its foundation, addressing how each assist in the development of aggression, and examining how and why parental neglect and SES contextually may intensify this behavior.

Background

Selected articles relating to environmental factors, specifically parental neglect, SES, and the development of adolescent aggression, informed the need for the current study. The keywords searched were *adolescent aggression*, *parental neglect*, *parental stress* and *burnout*, *outcomes of parental rejection*, *SES* and *parent/child relationship*, *neighborhood* and *aggression in teens*, *effects of SES on adolescent behavior*, and *effects of SES on parental behavior* in Academia, American Psychological Associates (APA), Academia, Frontiers in Psychology, Google Scholar, National Center for Biotechnology Information, and SAGE Publications. Buckley et al. (2018) examined the relationship

between SES factors and cognitive and behavioral outcomes in adolescents. Buckley et al. emphasized the importance of social interaction and SES on physical and psychological health as people develop. Buckley et al. suggested that lower SES may contribute to substance use, lower academic achievements, and juvenile delinquency. Buckley et al. suggested future research should examine the effect of emotional stimuli, such as peer and parental relationship, on adolescent development and function.

Craig et al. (2021) studied 59,000 juvenile offenders, both disadvantaged and affluent, and the effect of adverse childhood experiences on delinquency. Craig et al. concurred with previous studies on the influence of disadvantaged neighborhoods on juvenile behaviors. Craig et al. suggested that further studies consider adverse childhood experience, such as maltreatment, and the link to negative outcomes in disadvantaged and affluent neighborhoods.

Deutsch et al. (2011) examined environmental factors of high- and low-risk neighborhoods of 2,277 African American and 5,973 European American adolescents. The study found that parental practices and peer association had a strong effect on both groups, either high- or low-risk neighborhoods. This study also examined the effect of low and affluent neighborhoods on adolescent behavior among different cultural backgrounds. Parental influence was not considered in the study.

Doom et al. (2015) examined the relationship between environmental instability and future risk-taking behaviors in children. Doom et al. corroborated previous studies that suggested a link between early and chronic exposure to stress in children and physiological complaints. Doom et al. concluded that unpredictability in environment

was a good predictor of future risk-taking behavior. Doom et al. further stated that an association between environmental and parental harshness should be considered in future studies.

Fatima and Sheikh (2017) examined parent-child relationship and aggression. Fatima and Sheikh considered previous research that provided evidence of positive parenting strategies, such as warmth and support, with positive child and adolescent behavior (less aggressive behaviors and adjustment problems). Fatima and Sheikh supported findings from these previous studies, adding differences in maternal and paternal parenting techniques that may further contribute to the likelihood of problematic behavior in their children. Fatima and Sheikh suggested future studies should consider more emphasis on SES as reported by at-risk or aggressive adolescents.

Chainey and Burke (2021) noted that the most influential factor of adolescent behavior is parenting styles and behaviors. Although peer influences become a major factor in this age group, parenting behaviors and the relationship between adolescents and parents may have more lasting effects throughout adulthood. The study also suggested that environmental factors have an effect on parenting behaviors, and also contribute to adolescent outcomes. Findings provided insight into how parental behavior and parental styles in conjunction affect the behavior of children, and how parental behavior may change as the child reaches adolescence. For example, an authoritative parent may exhibit warmth in childhood and be more demanding in adolescence. Chainey and Burke suggested future research should include neighborhood conditions as a moderator because high-risk neighborhoods have been shown to affect adolescent development.

Jamaluddin (2013) provided information on research related to parent–child bonding and juvenile delinquency. Jamaluddin identified universal trends in lack of parental supervision and deviant behavior in juveniles. This study considered Indian juveniles, juveniles in Western societies, and Malaysia. Jamaluddin concluded that parent–child interaction had an effect on adolescent behavior and interpersonal skills, cross culturally. This study did not include domicile influences.

Magarino et al. (2021) conducted a meta-analysis regarding cultural differences in the relationship between parenting and children's behavior. The study was done with a sample of 14,990 children. Parent and teacher reports were used to collect information on the relationships between emotional problems, ethnicity, and parenting techniques. Parents reported that environmental factors influence parental behavior. The study found that parent harshness was positively correlated to adolescent aggression; however, this relationship differed in degree among groups. This study did not address differences in SES.

Roubinov and Boyce (2018) investigated the effects of SES on parenting and found a correlation between SES and parental stress, in which higher levels of parental stress were found in those classifying as lower SES. Findings suggested lower SES subjects' children to higher incidence of exposure to violence, poorer mental and physical health and parental health education, and higher parental stress, which may be associated with unstable or unpredictable parenting practices or behavior. This study addressed parental behavior but did not address adolescent behavioral outcomes.

Smokowski et al. (2014) studied the effects of positive and negative parenting practices on adolescent mental health outcomes in a multicultural sample of rural youths in a 1-year longitudinal study conducted with a sample of 2,617 rural adolescents, with a 1-year follow-up. Smokowski et al. found that negative parenting skills contributed to further negative behavior (hostility, neglect) in adolescents and positive parenting (support, warmth) contributed to positive behavior. The study did not include effects of SES.

Problem Statement

Aggressive behavior is defined as a pattern of impulsive, disruptive, destructive, defiant, physical, or verbal harm to self or others (Siever, 2008). Although previous studies on parenting styles and behaviors, and environmental factors such as culture, peer influence, and SES, provided insight on the effects of aggressive behavior in adolescents as a single variable (environmental factors related to aggression in adolescents or parental behavior and its effect on adolescent aggression), research was needed to identify how these factors together (environmental factors and parental behavior) are associated with adolescent behavior (Chainey & Burke, 2021). Further research was needed to examine how parental behavior may affect adolescent behavior and provide greater understanding of triggers of aggression in adolescents. The current study aimed to address the following question: How does parental neglect, along with SES, contribute to aggressive behavior in adolescents?

Purpose of the Study

The purpose of this study was to examine the relationship between SES, parental neglect, and aggression in adolescents. Because many factors may be related to the development of aggression in adolescents, this study considered SES, defined as the combination of feelings of domicile and neighborhood safety, financial stability, and educational and occupational experience (American Psychological Association [APA] 2019), and its effect on parental neglect, defined as the lack of emotional response, indifference, withdrawal, or other physical and psychological support (Khaleque, 2014), and aggression in adolescents, defined as a pattern of impulsive, disruptive, destructive, defiant, physical, or verbal harm to self or others (Siever, 2008). Although previous studies on parental behaviors or SES provided insight into the effect of aggressive behavior in adolescents as a single variable, research was needed to identify how these factors contextually are associated with adolescent behavior (Chainey & Burke, 2021).

Research Questions and Hypotheses

The research question and hypotheses for this study were as follows:

RQ: Based on categorical predictors, how does parental neglect and domicile neighborhood predict the likelihood of aggressive behavior in adolescents?

H_o: Based on categorical predictors, there is no statistically significant relationship between parental neglect, domicile neighborhood, and the likelihood of aggressive behavior in adolescents.

H_a: Based on categorical predictors, there is a statistically significant relationship between parental neglect, domicile neighborhood, and the likelihood of aggressive behavior in adolescents.

Theoretical Framework

The theoretical foundation for this study was the parental acceptance-rejection Theory (PARTheory) developed by Rohner in 1980. The PARTheory addresses fundamental questions regarding causes and consequences of rejection from attachment figures, and how they affect human development throughout the lifespan. The PARTheory is divided into three subtheories: personality subtheory, coping subtheory, and sociocultural subtheory (Rohner et al., 2012). According to this theory, humans require acceptance and warmth from attachment figures (parents, caretakers, partners).

Collectively, the subtheories depicted in PARTheory are the foundation of perceived acceptance or rejection (warmth dimension). Parental personality and sociocultural factors have an impact on the ways in which individuals identify with and execute parental behaviors. This in turn indicates to the child how to behave, demand more attention, model similar behavior, develop effective coping abilities, and expect further acceptance or rejection from future attachment figures (Rohner et al., 2012).

This theory is cross-culturally accepted regarding parental love and acceptance, and is considered to be the basis for appropriate social and emotional development universally, regardless of sex, age, and ethnicity. This theory suggests that children who perceive to be neglected or rejected will have impaired self-esteem and efficacy, emotional instability and/or unresponsiveness, depressed effect, hostility, aggression, and

an overall negative worldview (Rohner et al., 2005). These externalizing behaviors are a response to lack of positive regard and an attempt to avoid future psychological and emotional harm (Khaleque & Rohner, 2001). The relevance of the PARTheory to the current study is described in further detail in Chapter 2.

Nature of the Study

The nature of this study was quantitative with a nonexperimental correlational design using a binary logistic regression. Binary logistic regression allows the researcher to predict the probability that one dependent variable (in this case adolescent aggression) is influenced by multiple independent variables (in this case parental neglect and SES). Objective ratings of parental rejection/acceptance and SES, and how they influence the categorical predictor (moderate to high aggressive tendencies compared to no to mild aggressive tendencies) may provide a clearer understanding of the individual and contextual effects on the dependent variable (see Wuensch, 2014). The data for this study were collected using questionnaires addressing parents' views of whether their adolescent showed aggressive behavior, parental acceptance, and perceived SES.

A sample of 110 parents of adolescents age 12–18), 55 of whom reported aggressive complaints and 55 of whom reported no aggressive complaints, were considered. Recruitment was done through email flyers and social media groups using a probability sampling technique known as stratified sampling. Data for this study were gathered through three short questionnaires administered via email or telephone: The Parental Acceptance-Rejection Questionnaire (PARQ) short form, the Children's Anger Management Scale (CAMS), and the MacArthur Scale of Subjective Social Status. The

PARQ short form is a 24-item questionnaire developed by Rohner (2001) that assesses an individual's relationship with their child. The questionnaire consists of four subscales, which include parental warmth/affection, hostility/aggression, indifference/neglect, and undifferentiated rejection (Khaleque & Rohner, 2001). The CAMS is a 11-item questionnaire that assesses perceived physical and verbal aggression in the adolescent (Zeman et al., 2001). Lastly, the MacArthur Scale of Subjective Social Status is a single-item measure that assesses an individual's perceived rank in society (Stanford University, n.d.).

Definitions

The key terms and definitions essential to an understanding of the study are provided. Definitions and variables are further described in Chapter 2.

Aggression: For the purpose of this study, a pattern of intentional behavior meant to cause physical and/or psychological harm to self or others (Eisner & Malti, 2015). Although many studies described a diversity in types of aggression (internal and external behaviors), these studies concurred that aggressive behaviors are impulsive, disruptive, destructive, defiant, physical, or verbal (Siever, 2008).

Neglect: The deprivation of basic needs by the caretaker that result in physical and or psychological harm (National Research Council, 1993), also referred to as maltreatment or psychological. For the purpose of the current study, caretakers refer to parents or guardians of an underage individual. Although neglect is thought to be difficult to define and recognize, child protective agencies nationwide recognize specific categories of maltreatment: physical, educational, emotional, and medical (Karam, 2019).

Socioeconomic status (SES): A person's social and economic position. SES is measured and influenced by many factors that include income, occupation or trade, and education. Other factors that affect SES are neighborhood of residence, age, race/ethnicity, gender, marital status, and number of individuals in the household cared for such as aging adults or children. SES is classified as low, middle, and high. Although a large percentage of Americans identify themselves as middle class, about 52% of the population is classified as middle class, 29% as lower class, and 19% as upper class, according to Fry with Pew Research Center (Fry, 2016).

Assumptions

One assumption of this study was that participants would answer questionnaires completely and honestly. I assumed that the questionnaires being used were reliable and valid and could be administered generally. Because previous research suggested multiple variables related to parental behavior and environmental influences contribute to negative behavior in adolescents (Robles-Haydar et al., 2021), I assumed that there would be some association between parental neglect, SES, and aggression tendencies in adolescents. Similarly, I assumed there would be some association between parental warmth, SES, and none to mild aggressive tendencies in adolescents.

Scope and Delimitations

A sample of 110 parents of adolescents age 12–18, 55 of whom reported moderate to high aggressive complaints and 55 of whom reported no to low aggressive complaints, were considered. Other demographics such as parents' age and sex were recorded but were not a basis for exclusion. Parents who identified as high, middle, and low class were

considered because previous research described an unclear distinction between higher middle class, lower middle class, and lower class (Fry & Kochhar, 2016).

Parents of adolescents who had been diagnosed with a neurodevelopmental disorder, such as attention deficit hyperactivity disorder, autism spectrum disorder, or learning disorders, were excluded from the study because behavioral concerns may have been secondary to disorder or medication use. Similarly, participants whose adolescents were diagnosed with behavior or personality disorders, in which symptomology included aggression, were also disqualified for the study. Misdiagnosis or lack of appropriate intervention has the potential to increase problematic behavior and stigmatization that may be irreparable and carry into adulthood (Doom et al., 2015). The current study was positioned to create social change in the way people view the causes and effects of aggression in adolescents, as well as treatment in externalizing behavior.

A delimitation of this study was that adolescents would have moderate to high aggression or none to mild, experience parental warmth or neglect, and reside in a specific neighborhood according to the parent or caretaker. The adolescent's perceptions of parental behavior, neighborhood in which they reside, and their own behavior may differ from what the parent/caretaker reports. Another delimitation was that some forms of aggression have been shown to be slightly higher among age and sex, and change as a person develops; parental behavior also changes as the child develops (Logan-Greene & Jones, 2015).

Limitations

Potential limitations to this study included additional factors that contribute to aggressive behavior in adolescents, such as substance use, gender, and culture (race). Substance abuse, both in parents and adolescents, has been shown to be a mediator in the parent–child relationship (attitudes toward parenting strategies). Also, aggression has been found to differ among gender in several studies. For instance, Logan-Greene and Jones (2015) found that males differ from females in internalizing and externalizing aggression, as well as duration and type of neglect. In addition, findings indicated the longer the adolescent is exposed to neglect and the type of neglect (lack of emotional support vs. lack of supervision), the greater the effect on the adolescent, which was shown to be more prevalent in males than females.

Another limitation to this study was consideration of cultural (racial) differences. Studies suggested differences in attitudes and perception of parental behavior and SES among different cultures. For example, E. Lee et al. (2015) suggested that cultures differ in support systems within lower class neighborhoods. E. Lee et al. described differences in neighborhood resources and support from extended family that have been observed more in Asian and Hispanic cultures than Caucasian and African American cultures. Additionally, E. Lee et al. recognized potential effects of the COVID-19 pandemic on adolescents' mental health that could not be accounted for. Chaffee et al., (2021) interviewed teens over a 6-month period on the stress, anxiety, and other mental health concerns associated with the pandemic. Fifty percent of the 100 U.S. teens reported additional stress in the wake of the pandemic. Lastly, although a binary logistic

regression allows for the comparison of multiple independent variables, it does not allow for the prediction of continuous effects, such as levels of aggressive behavior, change overtime in parent's behavior, or change in SES (Robinson, 2018). These limitations may be beneficial in understanding factors associated with negative behavior, and should be considered in further examination longitudinally.

Significance

The results of this study may provide education and insight to clinicians and other mental health care professionals, parents/caretakers, and educators regarding how SES influences parental behavior and adolescents' behavior differently. Results may aid in appropriate consultation measures, proper case conceptualization, and more accurate diagnosis and treatment to behavioral problems in adolescents. Many adolescents when diagnosed with a behavioral disorder such as oppositional defiant disorder or conduct disorder carry a stigma associated with the diagnosis, which further contributes to their behavioral problems. Mental health care professionals should consider how these behaviors and diagnosis affect the adolescents' long-term behavior and development.

Interventions in problematic behavior are most successful when the behavior is discovered and an appropriate intervention is implemented. Misdiagnosis or lack of appropriate intervention has the potential to increase problematic behavior and stigmatization that may be irreparable and carry into adulthood (Doom et al., 2015). Parental behavior has been suggested to change as the adolescent's behavior changes, as seen in delinquent behavior. Many studies have shown that parents adjust their behavior as their adolescent's behavior changes (E. Lee et al., 2015). The current study may help

parents consider strategies of effective and stable parenting related to positive adolescent outcomes. Clinicians and educators may consider behavior change (internalizing and externalizing) in different environments (school setting versus domicile setting), in regard to SES and parental neglect, and distinguish when these patterns of behavior are most likely to occur and the cause of aggressive behavior. The current study is positioned to create social change by considering the way in which people view the causes and effects of aggression in adolescents, as well as treatment in internalizing and externalizing behavior.

Significance to Theory

The findings of this study may provide greater insight into the effect of aggressive behavior in adolescents by considering two major factors: parental neglect and SES. Although previous studies on parenting styles and behaviors and environmental factors such as culture, peer influence, and SES provided insight into the effect of aggressive behavior in adolescents as single variables (environmental factors related to aggression in adolescents or parental behavior and its effect on adolescent aggression), research was needed to identify how these factors together are associated with adolescent aggression (Chainey & Burke, 2021). The current study aimed to advance knowledge on how parental neglect, along with SES, may contribute to aggressive behavior in adolescents contextually.

Adolescents learn behavior from an early age. Children learn how to engage with others and regulate their emotions from their parents and caretakers. Parents play a significant role in shaping their children's personality and behavior (Talmon & Ginzburg,

2019; You & Lim, 2015). Additionally, studies found that the neighborhood in which a person lives may also play a role in the development of behavior. Children and adolescents who grow up in areas with lower exposure to negative behavior have been shown to have less negative behavior themselves (Yoon et al., 2017). The feeling of safety in one's neighborhood has also been found to buffer the effects of parental neglect, suggesting that if an adolescent does not feel safe in their home or lacks a healthy attachment with parents/caregivers, neighborhood cohesion may alleviate some of these domicile dysfunctions (Beckman, 2018) and serve as an additional model of positive behavior.

Significance to Practice

This study may be beneficial to parents because children and adolescents are inclined to simulate and adopt the standard behaviors in their environment, modeling the behavior they are most familiar with. Parental warmth, or a secure child–parent attachment, promotes healthy physical and psychological growth. Children and adolescents who experience maltreatment have been shown to have persistent difficulty with emotional regulation and self-control and increased aggressive and disruptive behaviors. Parents who have difficulty with emotional regulation may also observe similar in their offspring (Yoon et al., 2017).

SES may also show adolescents what behavior is acceptable in society or social settings; neighborhoods that provide a sense of safety and belongingness have been proven to offset effects of maltreatment and degree of SES (Riina et al., 2014). Lastly, in many cases parental neglect is not purposeful, suggesting that there may be a lack of

discerning parental responsibility. One implication of this study was to promote parental education and further development. The study may also help educators have a better understanding of potential causes of learning, memory, and behavioral problems in some students.

McNamara (2020) found that individuals from disadvantaged neighborhoods were more likely to have decreased hippocampal and overall brain volume. The hippocampus is responsible for processing and encoding long-term, complex, and episodic memory. The hippocampus is also vital in associative learning, learning through novel stimuli (conditioning, rewards, and reinforcement), and behavioral response. Additionally, the hippocampus plays a role in goal-oriented and social behavior (Dutta, 2019).

Adolescents in disadvantaged neighborhoods are more likely to witness violence and abuse, which normalizes these behaviors (Lansford, 2018). Children and adolescents who witness or experience violence and abuse are more likely to become aggressive. Children and adolescents who experience maltreatment or neglect from their caretakers have been shown to experience many concerns, such as internalizing feelings (depression and anxiety) and questioning others' intentions, which may lead to externalizing (aggressive) behaviors.

These individuals may also have trouble making and maintaining meaningful relationships with adults and peers due to a skewed sense of self-worth and others' motives or intentions. This may continue to develop as they enter adulthood, and may affect occupational endeavors and other relationships (Shahab et al., 2021). Educators may be a conduit for safety, observing for these characteristics. Educators may be able to

provide a more detailed assessment of reasons for behavior when suggesting interventions, provide understanding of children's experiences.

The social impact of aggression in adolescents due to parental neglect and SES is evident in multiple ways. First, children and adolescents learn self-regulation strategies from their parents and caretakers. Parents who have difficulty with emotional regulation were found to have children and adolescents with similar difficulties (Di Giunta et al., 2018). This suggests that children and adolescents who witness violence or abuse may see this behavior as a standard expression; another reaction to witnessing violence or abuse is to avoid or internalize it. Similarly, children and adolescents who experience a lack of parental emotion (emotional neglect) have been shown to have more physical, psychological, social, and emotional problems than adolescents who report low to no emotional neglect (You & Lim, 2015).

Second, those who reside in lower SES communities have been found to have higher rates of obesity, cardiovascular concerns, depression, suicidal ideation, anxiety, behavioral problems, developmental concerns, and infant mortality rate (Crossman, 2019). This affects society and mental and medical health care workers by increasing the need for health care visits and health care workers, of which there is a shortage in many low SES communities. This also increases the crime and poverty rate and decreases the amount of care individuals receive when in need of medical and psychological care.

Significance to Social Change

This study may promote positive social change by considering the way in which people view the causes and effects of aggression in adolescents. Results may lead to

greater empathy and understanding of variables that play a major role in human development, including social and individual influence, treatment in internalizing and externalizing behavior, and indications and contraindications of invasive and noninvasive treatment methods. Results may be used to lower the risk of negative responses and outcomes, as well as incidence of misdiagnosis, which may reduce the need for additional treatment and negative effects associated with diagnosis (stigmatization).

Summary and Transition

This study focused on identifying the significance of SES and parental neglect in the development and persistence of aggression among adolescents. The purpose of this study was to examine the relationship between SES, parental neglect, and aggression in adolescents. The nature of this study was quantitative with a nonexperimental correlational design using a binary logistic regression. The results of this study may provide education and insight to clinicians and other mental health care professionals, parents and caretakers, and educators regarding how SES and parental behavior influence adolescents' behavior differently. Chapter 2 provides a review of previous studies associated with parental neglect, SES, and aggression in adolescents. I discuss significant findings and gaps in research that justify further research.

Chapter 2: Literature Review

Problem Statement

Aggressive behavior is defined as a pattern of impulsive, disruptive, destructive, defiant, physical, or verbal harm to self or others (Siever, 2008). Although previous studies on parenting styles and behaviors, and environmental factors such as culture, peer influence, and SES, provided insight on the effect of aggressive behavior in adolescents as a single variable (environmental factors related to aggression in adolescents or parental behavior and its effect on adolescent aggression), research was needed to identify how these factors together (environmental factors and parental behavior) are associated with adolescent behavior (Chainey & Burke, 2021). Further, research was needed on how parental behavior may affect adolescent behavior, which may provide a better understanding of triggers of aggression in adolescents. The current study addressed the following question: How does parental neglect, along with SES, contribute to aggressive behavior in adolescents?

Purpose

The purpose of this study was to examine the relationship between SES, parental neglect, and aggression in adolescents. Because many factors may be related to the development of aggression in adolescents, this study aimed to consider SES, defined as the combination of feelings of domicile and neighborhood safety, financial stability, and educational and occupational experience (APA, 2019), parental neglect, defined as the lack of emotional response, indifference, withdrawal, or other physical and psychological support (Khaleque, 2014), and how these two variables effect aggression in adolescents,

defined as a pattern of impulsive, disruptive, destructive, defiant, physical, or verbal harm to self or others (Siever, 2008). Although previous studies on parental behaviors or SES provided insight on the effect of aggressive behavior in adolescents as a single variable, research was needed to identify how these factors contextually are associated with adolescent behavior (Chainey & Burke, 2021).

Literature Search Strategy

Search terms included *aggression in childhood*, *attachment theory*, *child abuse*, *child neglect*, *development of aggression*, *development of aggression in children*, *effects of neglect*, *neglect*, *PARTheory*, *PARTheory vs. attachment theory*, *socioeconomic status*, *socioeconomic status* and *education*, *socioeconomic status* and *occupation*, *socioeconomic status* and *race*, *types of aggression*, *types of neglect*, and *types of neglect during childhood*.

Theoretical Foundation

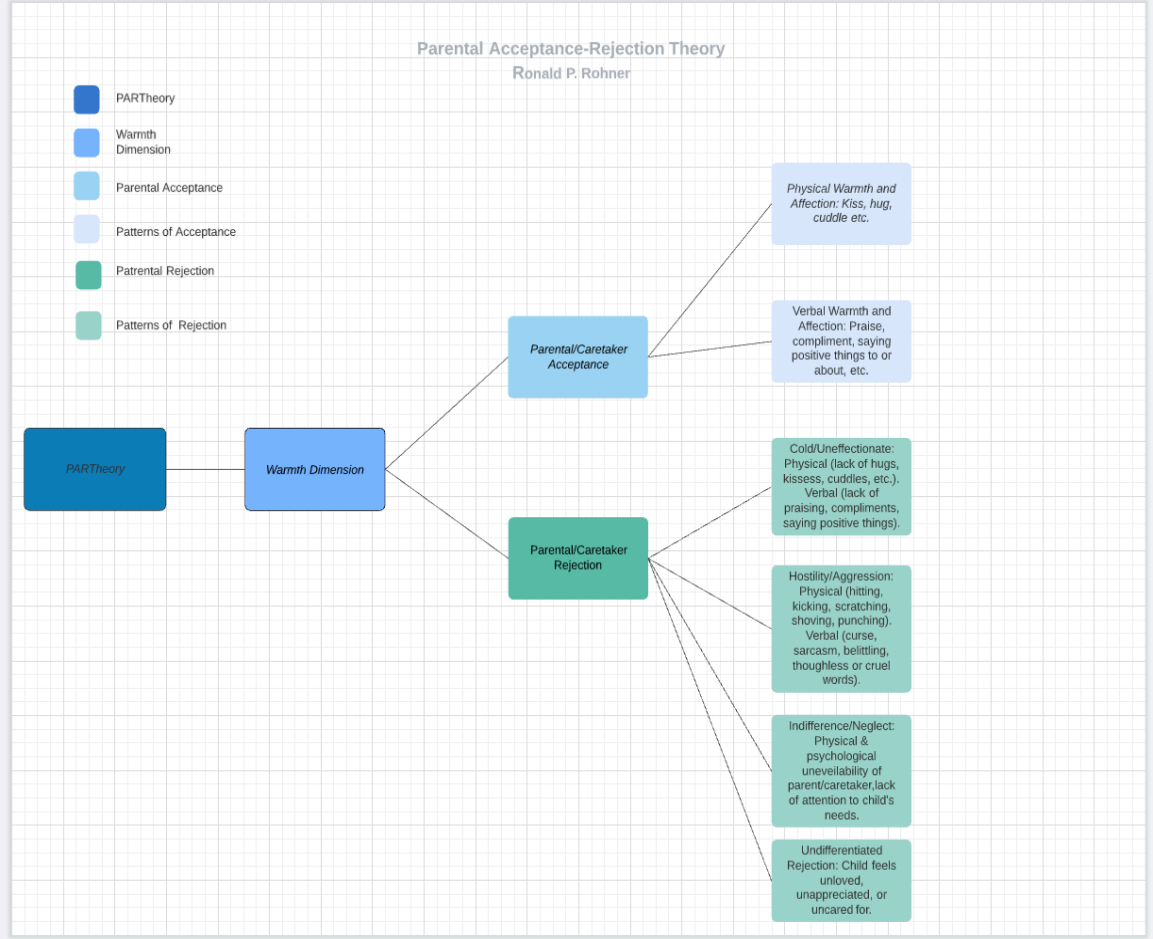
The PARTheory is a multivariate theoretical model acknowledged worldwide. This evidence-based theory is divided into three subtheories and incorporates similar views to historical works of attachment theory. Developed by Rohner in 1980, PARTheory addresses fundamental questions regarding causes and consequences of rejection from attachment figures, and how they affect human development throughout the lifespan (Rohner et al., 2012). According to PARTheory, humans require acceptance and warmth from attachment figures (parents, caretakers, partners) and those who are relevant to the individuals' social and emotional development or growth. This is

considered ubiquitous because PARTheory is based on perceived warmth and acceptance (Hughes et al., 2005).

Individuals who feel rejected by attachment figures may develop behavioral and emotional regulation problems related to hostility and aggression, depression, and anxiety (Hughes et al., 2005). Parental warmth and acceptance or rejection is known as the warmth dimension of parenting (Rohner et al., 2012). These perceptions may extend beyond the attachment figure, affecting an individual's self-esteem and self-adequacy, dependence on others, worldview, and religious views (Hughes et al., 2005). The PARTheory (see Figure 1) is divided into three subtheories: personality subtheory, coping subtheory, and sociocultural subtheory (Rohner et al., 2012).

Figure 1

Parental Acceptance-Rejection Theory (PARTheory)



Note. Figure 1 was created to summarize variables and the theoretical foundation. Information in the figure was summarized from Rohner et al. (2008) and was created by Chemarin Eve Boyd.

Warmth Dimension of Parenting

The warmth dimension, according to PARTheory, represents the level of attachment between parent/caregiver and child. There are two facets to the warmth dimension (parental acceptance and parental rejection), which include physical, verbal,

and symbolic responses. These responses have a constant and lasting effect on the child, which may be carried into other relationships and adulthood (Rohner et al., 2012). Parental warmth refers to the parent/caregiver validating the child's feelings and needs, giving comfort and support, showing concern and care, and demonstrating their acceptance and love of the child (Rohner et al., 2008). Parental rejection refers to perceived feelings of unaffectionate or uncaring, lack of support, impatience, hostility or anger, and coldness or harshness displayed physically or through verbal response (Rohner et al., 2008).

Personality Subtheory

Humans have innate emotional needs that are met through parents/caregivers or other attachment figures. These needs relate to comfort, nurturing, support, security, and well-being. These emotional needs become more complex as people develop physically and mentally (childhood to adulthood). PARTheory regards any individual a person perceives as a long-term attachment figure, or individuals with whom they have a persistent affectional bond. The quality of emotional support is central to an individual's psychological development. Individuals who have a healthy attachment or feel accepted are likely to become more independent as they develop and have fewer internal and external regulation concerns, such as the ability to process information about the world around them and others intentions (Rohner et al., 2008).

Coping Subtheory

The coping subtheory relates to an individual's ability to handle stressful events or respond adequately. The PARTheory considers individuals who have experienced

rejection from a parent or other attachment figure, and their ability to develop superlative coping skills. In these individuals, it is likely that multiple attachment figures have had an influence, which contributes to the individual's perception of quality attachment. Much like the personality subtheory, relationships to attachment figures, in which the individual experiences both rejection and acceptance, are involved throughout the individual's development (childhood to adulthood). The PARTheory also acknowledges copers who have been rejected by multiple attachment figures throughout their lives, noting that they may have the ability to cope in some areas but fail to cope in other areas such as work and personal relationships. The individual's history with perceived rejection may carry into their work performance, or perception and expectation of other relationships, whether these perceptions are positive or negative (Rohner et al., 2012).

Sociocultural Subtheory

According to the sociocultural subtheory, an individual's feelings of acceptance or rejection are also shaped by the society in which they live, cultural and religious beliefs, and other symbolic or expressive traditions such as statues/figures, folklore, music, and other artistic traditions. The sociocultural subtheory considers institutions such as school, work, religious facilities, and neighborhoods as vessels for perceived rejection or acceptance (Rohner et al., 2008). Social, cultural, and symbolic traditions contribute to a parent/caregiver or other attachment figure's beliefs and behaviors about rejection and acceptance. These values are central to the belief that PARTheory is accepted worldwide because the sociocultural subtheory is specific to their region's

beliefs of what constitutes parental acceptance or rejection, and one's perception of such (Rohner et al., 2012).

PARTheory in Relation to Parental Neglect, Socioeconomic Status, and Aggressive Behavior in Adolescents

Parental neglect refers to the failure to care for physical and/or psychological needs of children. Parental neglect is delineated in PARTheory's warmth dimension, which emphasizes the need for parental acceptance. Parental neglect or parental rejection occurs when a child perceives their parent or other attachment figure as cold, unresponsive or unaffectionate, and angry or hostile, whether the rejection is physical, verbal, or through nonverbal gestures (Rohner et al., 2012). Yang et al. (2021) stated that children who feel rejected are more susceptible to externalizing behaviors.

PARTheory's sociocultural subtheory incorporates the social and cultural aspects of perceived acceptance or rejection. The sociocultural subtheory relates to SES because it considers societal norms; the environment in which a person lives; institutional environments that individuals and families regularly attend, such as school, work, and religious facilities; and how these sociocultural aspects influence parental behavior and their child's behavior. To further break down the effects of the sociocultural aspects of PARTheory and the influence on parental behavior, I discussed how SES influences parental behavior as stress of financial burdens; lack of stability, both occupationally and domestically, may affect parental stress levels and parents' ability to attend to children's psychological and physical needs (Lansford, 2018).

Collectively, the subtheories depicted in PARTheory are the foundation of perceived acceptance or rejection (warmth dimension). Parental personality and sociocultural factors have an impact on the ways in which individuals identify with and execute parental behaviors. This in turn indicates to the child how to behave, demand more attention, model similar behavior, cope, and expect further acceptance or rejection from future attachment figures (Rohner et al., 2012).

Literature Review

Research indicated that there are several variables associated with the progression of negative behavior in adolescents. However, based on the literature review, I found that SES and parental neglect were the most influential factors on the development of aggression in adolescents.

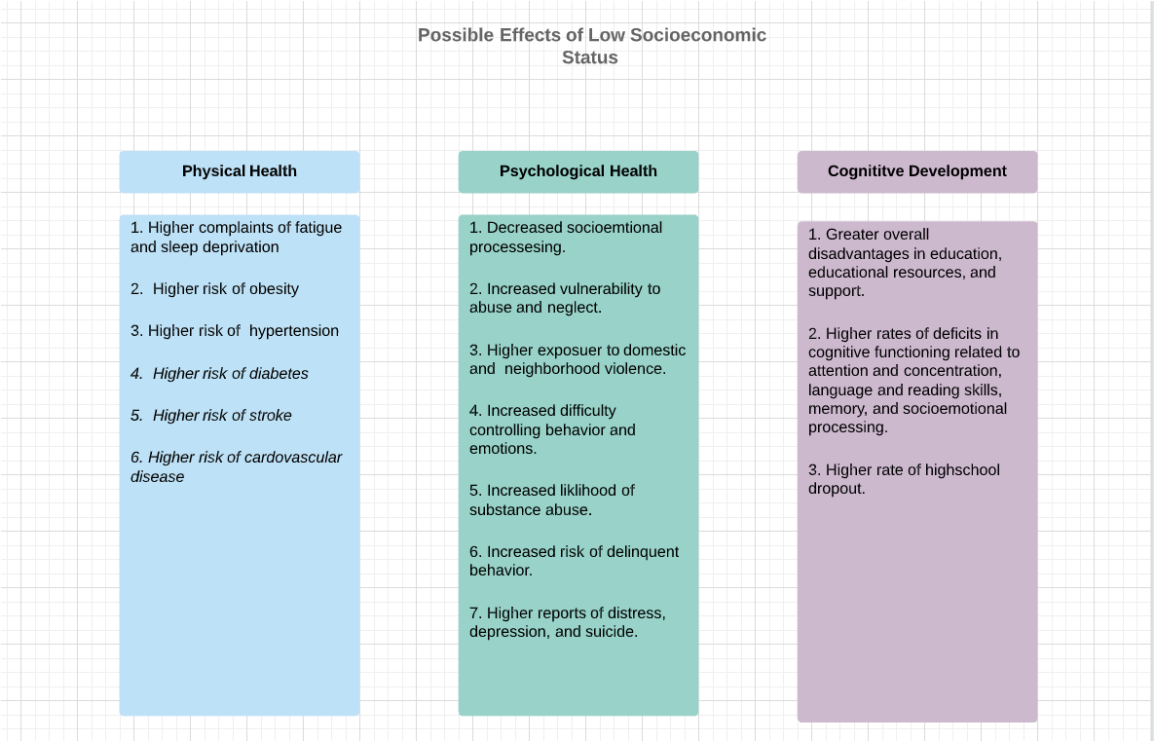
Socioeconomic Status

SES is defined as ones social and economic position. SES is measured and influenced by many factors which include income, occupation or trade, and education. Other factors that affect SES are neighborhood one resides in, age, race/ethnicity, gender, marital status, and number of individuals in household cared for, such as aging adults or children. SES in general is classified as low, middle, and high. While a large population of Americans identify themselves as middle class, about 52% of the population is classified as middle class, 29% as lower class, and 19% as upper class, according to Fry (2016) with Pew Research Center. This is calculated based on city, state, household income before taxes, number of individuals in household, education level, age, race/ethnicity, and marital status (Fry, 2016). Many studies have determined that SES has

a profound effect on one's physical, psychological, and physiological health (APA, 2017). See Figure 2 for possible effects of low SES.

Figure 2

Possible Effects of Low Socioeconomic Status



Note. Figure 2 was created to summarize variables and the theoretical foundation. Information in the figure was summarized from APA (2017) and created by Chemarin Eve Boyd.

Socioeconomic Status and Physical Health

SES has been found to effect one's physical health in several ways. Many stressors account for more chronic illnesses, and are related to work/home balance, job security, income, healthcare availability, diet, and community violence (APA, 2017).

Collectively, individuals from low SES are reported to have a higher rate of fatigue, sleep deprivation, obesity, hypertension, stroke, cardiovascular disease, lower birth weight, and infant mortality than those identifying as middle or high SES (Anderson and Chesney, 2010; APA, 2017; Crossman, 2019). Similarly, individuals from lower SES reported a more sedentary lifestyle and higher caloric intake. This was evident in both child and adulthood.

Less physical activity, early learning opportunities such as preschool, (Saitadze, 2021) and high caloric intake were found to be predispositions to obesity and diabetes (Townsend and Scriven, 2014). Individuals from low SES have a higher risk of developing oral, head, and neck cancer, in part due to lack of medical and dental services available (Scully and Robinson, 2017). Women from high and middle SES reported more incidences of breast cancer and infertility than their counterparts (Moss, 2000); However, individuals from lower SES were found to seek medical attention later than those from middle and high SES (Muma, 2007).

Socioeconomic Status and Psychological Health

Psychological health refers to the homeostasis of one's emotions and behaviors, as it relates to internal and external processing of stimuli in one's environment at any given time, and their ability to effectively interact with others. Children in lower SES communities were found to have poorer socioemotional processing (APA, 2017). Socioemotional development allows individuals to process emotions, related to social experiences and assists in future conflict resolution, and the ability to relate to others (CDE, n.d.). Children from lower SES have an increased vulnerability to abuse and

neglect. Additionally, exposure to violence can have a profound effect on one's psychological health. While exposure to violence is seen in all classes, those from lower SES have a higher likelihood of exposure, as well, higher, more persistent effects associate with exposure to violence. This exposure significantly reduces one's socioemotional development, and increases negative emotional and behavioral responses (APA, 2017).

Children from lower SES are twice as likely to exhibit behavioral problems (APA, 2017). Adolescents from lower SES have been found to have higher incidences of emotional and behavioral regulation problems, delinquent behavior, substance use/abuse, suicidal ideation, aggression, and chronic stress (APA, 2017). Parents in lower SES whom reported distress, indirectly cause mental affliction to their children. Individuals from low SES reported higher rates of emotional distress, depression, suicide, and drug abuse (APA, 2017; Crossman, 2019). Similarly, one's perception of their SES effects their emotional state. Individuals in lower SES have been found to have higher exposures to environmental stressors, which may cause a negative mindset (Anderson and Chesney, 2010).

Socioeconomic Status and Cognitive Development

SES has been found to affect our functioning in totality. It not only effects our physical and psychological health, it also effects our cognitive development. Cognitive development refers to the ascension of one's growth throughout the lifespan. This includes reasoning, processing, understanding, thinking, and perception (cde, n.d.), including visual-spatial skills (Ali, Ali, Shahid, & Dilawar, 2021). Individuals from low

SES experience greater disadvantages in academics, educational resources, and support (Saitadze, 2021), as well as higher rates of developmental concerns (Crossman, 2019). Children in lower SES communities have been found to have higher deficits in cognitive function, related to attention and concentration, language and reading skills, memory, and poor socioemotional processing (APA, 2017).

Individuals who grow up in low SES have higher incidents of high school dropout than their counterparts. Potential college students in low SES households have similar reports; in particular, lack of resources, such as funding and access to institutions. Many researchers suggest that school environment contributes to SES dissimilarities in development, as much or more than domicile environment. As such, both of these environments are essential in cognitive development (APA, 2017).

Neglect

Neglect, also referred to as maltreatment or psychological abuse is defined as the deprivation of basic needs by the caretaker, that result in physical and or psychological harm (National Research Council, 1993). For the purpose of this study, caretakers refer to parents or guardians of an underage individual. While neglect is thought to be difficult to define and recognize, child protective agencies nationwide recognize specific categories of maltreatment: Physical, Educational, Emotional, and Medical neglect (Karam, 2019). Neglect may be mild, moderate, or severe and have lasting consequences. Duration and severity of neglect contribute to long term effects (Karam, 2019). Similarly, neglect is thought to show a pattern of behaviors, rather than a single episode; having multiple

occurrences, signs, or instances of neglectful behavior (National Research Council, 1993).

Ahlgren, Kalin, and Gerdner (2021) stated that 1 in 4 children are exposed to severe maltreatment, while The Center for Disease Control (CDC) stated that each year, 1 in 7 children encounter abuse or neglect (Holland, 2019). Neglect has been shown to be the highest reported form of child abuse by the United States Department of Health and Human Services. In 2008, Child Protective Services (CPS) acquired 3.3 million reports of abuse or neglect, and approximately 75% of those reports were child neglect (Karam, 2019). Reports from 2016 indicated neglect in 7 of 1,000 children. Research also shows a decrease in other forms of abuse from 1990 to 2006, while the rates for neglect have increased from 49% to about 75%. Neglect is more frequently reported in females than in males, and is thought to have historic features; parents who experienced forms of neglect during their childhood are more likely to be neglectful themselves (Karam, 2019). See Figure 3 for types of neglect.

Figure 3

Types of Neglect

Note. Figure 3 was created to summarize variables and the theoretical foundation. Information in the figure was summarized from Karam (2019) and created by Chemarin Eve Boyd.

Physical and Environmental Neglect

Physical and or environmental neglect is comprised of inadequate or lack of supervision of a minor, such as leaving underage children at home alone, or with an individual who is unable to properly care for them, or may put them in danger; hazardous environments such as availability to substances or firearms (alcohol, drugs, weapons),

dilapidated housing (no running water, heating, lighting, hoarding behavior), unacceptable hygiene (clean clothing, bathing, brushing teeth), and inadequate nutrition (unavailability of food); abandonment or evacuation child (leaving child with others and not returning for them, removing child from home), lack of proper safety measures while child is in vehicle (driving under the influence, lack of seatbelts/car seats), or leaving a minor in a vehicle unattended (Dar al Islam, 2020; National Research Council, 1993).

Educational and Medical Neglect

Educational neglect refers to the denial or refusal of proper education, such as not enrolling child in school or frequent tardiness and absentees (National Research Council, 1993). Educational neglect is also found when appropriate services or children with neurodevelopmental concerns or learning disabilities are not met (Dar al Islam, 2020), the inability to assist in schoolwork, or provide the child with necessary material to be successful in their studies (Karam, 2019).

Medical neglect refers to failure to provide adequate medical care for the child, such as lack of healthcare, refusal or delay to seek medical attention when advised or evident (National Research Council, 1993). This may occur in many forms, such as expected mother not seeking or delaying prenatal care, not seeking health insurance for children, lack of care when developmental milestones are not met, lack of compliance with well-baby check-ups. While dental care is described in physical/environmental neglect, it also falls under medical neglect, as it may cause further health concerns (Karam, 2019).

Emotional and Developmental Neglect

According to Yang, Xiong, & Huang (2021), emotional neglect is currently the most common form of child maltreatment. Emotional neglect is thought to be more difficult to detect than the aforementioned, as it is not readily observable; however, often coexisting with other forms of neglect or abuse. Research also suggests that emotional and developmental neglect have more lasting effects that carry into adulthood (Dar al Islam, 2020). Emotional neglect includes the disregard of emotional needs, causing emotional harm, or the inaccessibility to other family or friends (NAPSA, 2020). This relates to physical and psychological attentiveness, affection, supportiveness, communication and social interaction outside of their residence, exposure to witnessing domestic violence (Karam, 2019), or the allowance or encouragement of delinquent behavior. Developmental neglect is a direct effect of environmental, as the child is denied exposure to appropriate socio-emotional stimuli and appropriate conflict resolution (Dar al Islam, 2020).

Effects of Neglect

Individuals who have succumbed to neglect have shown biological, psychological, and physiological effects. Hormone levels such as cortisol (stress hormone) have been shown to be altered in those who have suffered from prolonged (moderate to severe) neglect. Cognitive domains, such as attention and concentration, novel learning, and working memory have also been shown to be effected in those who have endured educational neglect and exposure to domestic violence (Holland, 2019). Failure to thrive has been indicated in individuals of whom received little or no medical

care or lack of nutrition. Individuals from neglectful circumstances are also more likely to have difficulty in the formation and retaining of meaningful relationships (attachment), and experience difficulty with inhibition and maladaptive behaviors (Karam, 2019). Overall, childhood maltreatment has been found to have greater risk for autoimmune and heart, gastrointestinal disorders, diabetes, and cancer (Parker & Nemeroff, 2021).

Development of Aggression

For the purpose of this study, aggression is defined as a pattern of intentional behavior, meant to cause physical and or psychological harm to self or others (Eisner & Malti, 2015). While many studies have described a diversity in types of aggression (internal and external behaviors), these studies concur, aggressive behaviors are those in which are impulsive, disruptive, destructive, defiant, physical, or verbal (Siever, 2008).

Many forms of aggression have been established and include (see Figure 4): overt or direct aggression (physical), observable aggressive behaviors; covert or indirect (nonphysical); proactive aggression (bullying; physical or nonphysical), an instrumental form of aggression; relational aggression, harm to relationships or social status (Guerra & Leidy, 2008). Previous research notes a robust link between biological and environmental causes, which interact in the development of aggressive behaviors (Labella & Masten, 2017).

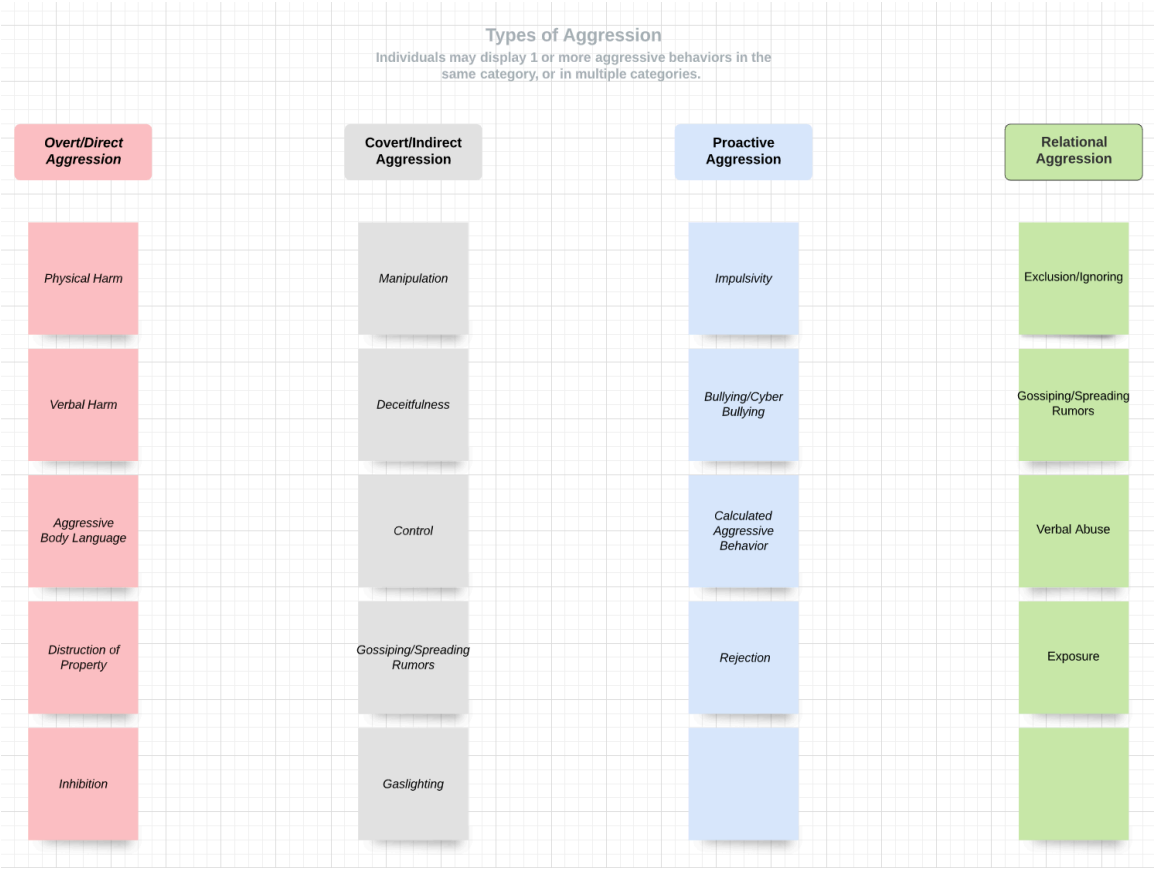
Aggression has been found to be a normal part of development. For instance, overt aggression is heightened around two years old, as our verbal communication during this period is limited (Lansford, 2018). Aggressive behavior tends to decrease as the child develops; vocabulary increases, and needs and wants become more reserved (Guerra &

Leidy, 2008). Covert aggression tends to increase as overt aggression decreases, gradually decreasing into elementary and middle school (Averdijk, Malti, Ribeaud, & Eisner, 2011).

When aggressive behaviors increase, or escalate overtime, or are outside of normal development; those displaying chronic high impulsivity and irritability/frustration, low tolerance, self-esteem, self-worth, and satisfaction, and persistent symptoms of loneliness and depression (Woodman, 2018), functionality, influences and purpose should be further examined (Cohen, Hsueh, Russell, Ray, 2006).

Figure 4

Types of Aggression



Note. Figure 4 was created to summarize variables and the theoretical foundation. Information in the figure was summarized from Guerra and Leidy (2008) and Labella and Masten (2017) and was created by Chemarin Eve Boyd.

Genetic, Prenatal, and In Utero Risks

The development of aggression consists of both environmental and genetic factors (Lansford, 2018). Previous research has determined that there is no single variable that contributes to the development of aggression, but likely many; However, aggression to some extent, is thought to start before birth (Guerra & Leidy, 2008). Labella & Masten

(2018), noted in utero risk factors that showed potential for aggression in children throughout development; substance use and exposure to toxins during pregnancy have been linked to aggressive and antisocial behaviors.

Similarly, Eisner and Malti (2015), recognized maternal exposure to lead and other pathogens, complications during delivery/birth, lack of prenatal care, and malnutrition during pregnancy and after birth as biological risk factors for aggression. Incessant stress causes hyperactivity of the hypothalamic-pituitary-adrenal (HPA) axis, in turn, activating the stress hormone cortisol. These hormones are then exposed to the fetus, causing similar and prevailing hormonal responses (Labella & Masten, 2018).

Researchers observed more externalizing behaviors in toddlers carrying the dopamine receptor gene DRD4 7-Repeat Allele, than in toddlers without this gene variant. Similarly, children with a particular COMT gene, known as Catechol-O-methyltransferase Val158Met, found to breakdown dopamine in the prefrontal cortex, had increased sensitivity to adverse experiences, and higher incidences of aggressive behavior than those without this genotype (Lansford, 2018).

Brain regions may also be telling of inherent or congenital risk factors. The pre-frontal cortex is responsible for planning, behavior, personality, and emotional response; Individuals with damage to the prefrontal cortex, especially when the brain is still developing, are more likely to have inhibited decision making, and are more vulnerable to substance use and criminal behavior. Similarly, reduction in grey matter in the pre-frontal cortex was identified in violent and antisocial offenders (Jorgensen, Anderson, & Barnes, 2015).

Our ability to process information, or the inability to process information logically, has been shown in the development of aggression (Lansford, 2018). The amygdala, within the limbic system, is responsible for reward, pleasure, emotional learning, and processing and filtering information. Individuals with low amygdala volume exhibited aggressive tendencies, increasing in intensity from childhood to adulthood (Lansford, 2018). Additionally, overactivity or underactivity of the amygdala has also been shown to cause aggressive behavior (Jorgensen, Anderson, & Barnes, 2015).

Parenting Behaviors

The development of aggression can be influenced by others (relationships, interactions and observations), and becomes active in other relationships and environments (Cohen, Hsueh, Russell, Ray, 2006). As discussed in the previous section, some parenting practices may have a biological component to the development of aggression, such as domestic violence (DV), lack of prenatal care, maternal malnutrition, and chronic stress; this section focuses on environmental factors; parenting practices after birth and as the child develops. Children who are exposed to emotional dysregulation in others around them have more difficulty with regulation themselves. Parents with aggressive tendencies serve as a host, passing the behavior to their children. This is likely seen as an appropriate response to social cues, or in interpersonal conflict (Lansford, 2018).

Children who have difficulty with emotional regulation have also been shown to have difficulty processing incoming information and problem solving (Averdijk, Malti,

Ribeaud, & Eisner, 2011) impaired judgement of the world around them, as well as others intentions (social cognitive understanding); Further, children who are unable to learn problem solving skills, both interpersonally and intrapersonally (Cohen, 2005), are more likely to develop chronic aggression (Averdijk, Malti, Ribeaud, & Eisner, 2011). Ali, Ali, Shahid, & Dilawar (2021), showed that children who witnessed aggression in their parents (DV), had deficits in verbal abilities (memory and comprehension), which further acknowledges a disconnect between intentions and judgement.

Aggressive or violent interactions with parents, or witnessing aggression or violence in the home may influence future aggressive behaviors in children and adolescents. Additionally, unstable parenting practices, parent neglect, passive (lenient or nonintrusive) parenting, authoritarian (strict rules, high expectations, and harsh punishment) parenting, unstable domicile environments, parental substance abuse, parental untreated mental illness and mood disorders have been reported to be contributing factors of aggression in children and adolescents (Labella and Masten, 2017).

Socioeconomic Factors

The previous section considered parental behaviors in the development of adolescent aggression. The influence of SES on the development of adolescent aggression includes a myriad of variables; However, one of the most influential is parental behavior. Children and adolescents learn behavior through their environments. Considering that they spend an exponential amount of time at home, children observe interactions between parents, siblings, neighbors, and equate these to normal behavior

(Lansford, 2018). Emotional regulation is also central to these observations (Di Giunta, et, al., 2018), learning what ques evoke response and how to react to negatively perceived situations. Therefore, if a child is witness to DV, negative interactions with friends, neighbors, other members in the home, or is subject to abuse themselves, even brief exposure (Lansford, 2018), this behavior becomes typical and expected (Di Giunta, et, al., 2018).

This is also true for unstable or turbulent parental behavior or SES (Jung & Schroder-Abe, 2019). Yoon, Tebben, & Lee (2013), found that adolescents who lived in neighborhoods with lower crime rates, experienced lower levels of aggressive behavior. Similarly, societies and or neighborhoods which promote violence (Woodman, 2018), have higher crime rates, and less resources (emotional and financial support), have been shown to be factors in both internalizing and externalizing behaviors in children and adolescents (Guerra & Leidy, 2008). Further, Riina, Martin, & Brooks-Gunn (2014), conclude that children who lack emotional and physical support from home, may still find refuge in their community. Cohesive societies or communities which create a sense of belonging, promote safety and trust, have been found to be protective mechanisms of adverse mood and behavior.

Relationship Between Socioeconomic Status and Aggression in Adolescents

Numerous researchers have found that lower SES is linked to higher behavioral problems in children and adolescents, of all ethnicities. Adshead, 2015 considered multiple aspects associated with disadvantaged neighborhoods and children's behavioral problems. For example, children who live in disadvantaged neighborhoods are exposed to

more crime and violence, which may affect their perception of what normal behavior is. Likewise, similar behaviors are seen in educational facilities which are located in these same neighborhoods; in many instances, with greater problematic behavior in an area, comes the pressure and stress to be part of that society. This problematic, and often aggressive behavior is seen as normal behavior overtime, and a need for belongingness.

Though for some individuals, the opposite may be seen; individuals may feel excluded, unsupported, lack of resources, discriminated or alienated. In both scenarios, these children and adolescents may begin to externalize or internalize problematic behaviors. Indeed, Haung et, al., (2017) found that adolescents from rural areas were more susceptible to misbehavior in school, and overall aggressive behaviors. In a study conducted in one rural high school in the United States, over 24% of participants reported aggressive concerns. These individuals also indicated higher psychological and physical complaints. Greater health complaints in children and adolescents displaying aggressive behaviors may be in part, due to lack of community health resources, and adverse childhood experiences or life stressors.

SES may affect one's stress level. Yoon, Tebben, & Lee, (2017) found that adolescents who felt safe in their neighborhood reported less aggression and delinquent behaviors than adolescents who reported not feeling safe in their neighborhood. In turn, they emphasize the need for further research in younger and middle aged children, as adolescents have more interaction with peers and adults in their neighborhood. Similarly, adolescents have greater cognitive development, and have the ability to communicate with others, with greater articulation.

Neighborhood safety, as well as neighborhood trust, referred to as neighborhood social cohesion, can offset aggressive behaviors, even in those in disadvantaged neighborhoods (Riina, et, al., 2014). Jung and Schroder-Abe (2019) suggested that individuals who lack social stability (within the neighborhood and school), have an increased susceptibility to observable aggressive behavior. Adolescent behavior is influenced by the behavior around them, what they see, what they hear, and what they collect from the society in which they live (Balogun & Chukwumezie, 2010). SES factors that contribute to aggressive behaviors in one's neighborhood include violence in their region, violence predictability, unstable communities, and segregated communities within a large neighborhood, such as specific streets viewed as notorious for greater traffic and crime, within a larger area viewed as friendly and safe. The social structure, that is, the interaction between others (individuals, relationships, society), has a direct and indirect influence on an adolescent's behavior (Cohen, et, al., 2006).

Relationship Between Parental Neglect and Aggression in Adolescents

Neglect is found to be the most common form of maltreatment. According to the US Child Protective Services, over 78% of reports of maltreatment were due to neglect. These children and adolescents are also more susceptible to chronic neglect, as this type of maltreatment is shown to have multiple causes and elements; neglect has several origins such as stress caused by instability of finances, SES, instable relationships, for example, which effects the parent's ability to properly care for their children; Camilo, Vaz Garrido, & Calheiros (2020), suggested that the more compromised the sub-systems or elements involved, the higher the likelihood of child maltreatment. Overtime,

maltreatment can affect a child's ability to self-regulate emotions, and increase probability of negative outcome and delinquency (Logan-Greene & Jones, 2015).

As we described patterns of neglect previously; parental behavior starts during pregnancy. How one cares for themselves and the care they receive during pregnancy, proper prenatal care, adequate nutrition, and reduction of stress levels. Inefficient family structure and poverty may affect one's ability to obtain the necessary resources, therefore impacting the growing embryo, and setting the tone for future parent-child relationship (Rezaei, PourHadi, & Shabahang, 2019).

In many cases, parental behaviors effect on their adolescent's behavior can be seen or observed during infancy. These negative parenting behaviors may result in negative child behaviors, that carry on into adulthood (Welsh, 2011). Parents behavior has been found to aid in the development of their child and adolescent's personality and social skills. Negative parenting behaviors may cause externalizing (overt or aggressive behavior), and internalizing (covert or depressive and/or anxious behavior) in their adolescents. This behavior in children and adolescents is due to instability, fear, frustration, and or low self-esteem, which increases over time (Lee, Choi, & Kim, 2017).

Georgiou & Symeou (2018), state that parental behavior is the most influential variable of overt and covert behaviors in their children. They considered the parents involvement in child development and needs. Lack of involvement, or neglect, effects the child's ability to regulate emotions, behaviors, and the way in which they view others and form future relationships. Additionally, the parent's relationship with their adolescent sets the stage for social growth. Negative parental/adolescent relationships and interactions

effect the way the adolescent internalizes other interactions, their independence, healthy attachment, and problem solving abilities or conflict resolution.

Children who have been neglected by their caretakers, may develop a skewed sense of self, in which they rely on others opinions of them to negate self-worth (Talmon & Ginzburg, 2019). DiGiunta, et, al., (2018), emphasized the importance of self-regulation and how both internalizing and externalizing can lead to aggressive behavior. They suggest that although internalizing behaviors can be observed as less harmful to others, the inability to self-regulate one's emotions can turn into aggressive behaviors. This may be due in part, by a parent's ability to monitor and regulate their own emotions. The inability to effectively control emotions is a representation of how their adolescent should react in similar situations. Further, evidence of the inability to properly regulate emotions, that leads to aggressive behaviors can lead to maladjustment in adulthood.

Craig, Wolff, & Baglivio (2021), studied the effects of adverse childhood experiences on violent adolescent offenders. They found that fifty percent of offenders had experienced multiple, and chronic forms of abuse and or neglect by the age of 18. This is consistent with previous work from Widom and Maxfield (2001), who found that among physically abused, neglected, and sexually abused children, physically abused and neglected children were more likely to exhibit violent behavior. These adverse childhood experiences were related but not limited to exposure to DV, parental substance abuse, parental mental illness, and abuse and or neglect (Craig, Wolff, & Baglivio, 2021).

Widom and Maxfield (2001), found that children and adolescents who were placed in foster care varied in degree of further violent behavior. They found that

children and adolescents who were placed in stable foster homes, showed less violent behavior; children and adolescents who were placed in multiple and or unstable foster homes showed no change in violent behavior or an increase, similar to findings of children and adolescents who stayed with abusive or neglectful parents.

Researchers have found a link between negative parental behavior and behavioral disorders in their children. Suggesting that these behavioral disorders are influenced heavily on parent-child relationship, and less on genetic makeup (Rezaei, PourHadi, & Shabahand, 2019). Indeed, the behavior of the parent/s has an effect on a child's physical, mental, social, and emotional development. You & Lim (2015), reported that maltreatment results in maladjustment; effecting physical, psychological, and social growth, that goes beyond childhood and adolescents. Beckmann (2018), emphasizes the importance of parental warmth, as a moderator for behavioral problems in children and adolescents. In this study, the researcher found a correlation between parental to child aggression, and child maladjustment. The study also evidenced a positive correlation between parental warmth, and child coping skills, suggesting that parental warmth assists in appropriate problem-solving skills, as well as properly adjusting to ones changing environments.

Relationship Between Parental Neglect, Socioeconomic Status, and Aggressive Behavior in Adolescents

The purpose of this study was to examine the relationship between SES, parental neglect, and aggression in adolescents. As many factors may be related to the development of aggression in adolescents, this study aimed to consider SES; the

combination of feelings of domicile and neighborhood safety, financial stability, and educational and occupational experience (APA, 2019) and its effect on parental neglect; the lack of emotional response, indifference, withdrawal, or other physical and psychological support (Khaleque, 2014), and aggression in adolescents; a pattern of impulsive, disruptive, destructive, defiant, physical, or verbal harm, to self or others (Siever, 2008). While previous studies on parental behaviors, or SES provide an insight on the effect of aggressive behavior in adolescents as a single variable, research was needed to identify how these factors contextually, are associated with adolescent behavior (Chainey & Burke, 2021).

Summary and Conclusions

Socioeconomic status (SES) is defined as ones social and economic position. It is measured and influenced by many factors which include income, occupation or trade, and education. SES for the purpose of this study relates to the combination of feelings of domicile and neighborhood safety, financial stability, and educational and occupational experience (APA, 2019). SES has been found to effect one's physical and psychological health, as well as cognitive development.

Neglect, also referred to as maltreatment or psychological abuse is defined as the deprivation of basic needs by the caretaker, that result in physical and or psychological harm (Psychology Today, 2019). For the purpose of this study, caretakers refer to parents or guardians of an underage individual. While neglect is thought to be difficult to define and recognize, child protective agencies nationwide recognize specific categories of

maltreatment: Physical, Educational, Emotional, and Medical neglect (Karam, 2019). Neglect may be mild, moderate, or severe and have lasting consequences.

For the purpose of this study, aggression is defined as a pattern of intentional behavior, meant to cause physical and or psychological harm to self or others (Eisner & Malti, 2015). Many forms of aggression have been established and include: overt or direct aggression (physical), observable aggressive behaviors; covert or indirect (nonphysical); proactive aggression (bullying; physical or nonphysical), an instrumental form of aggression; relational aggression, harm to relationships or social status (Guerra & Leidy, 2008). Previous research notes a robust link between biological and environmental causes, which interact in the development of aggressive behaviors (Labella & Masten, 2017).

Numerous researchers have found that lower SES is linked to higher behavioral problems in children and adolescents, of all ethnicities. For example, children who live in disadvantaged neighborhoods are exposed to more crime and violence, which may affect their perception of what normal behavior is. Neglect is found to be the most common form of maltreatment and has several origins, such as stress caused by instability of finances, SES, instable relationships. According to the US Child Protective Services, over 78% of reports of maltreatment were due to neglect. The purpose of this study is to examine the relationship between SES, parental neglect, and aggression in adolescents. While previous studies on parental behaviors, or SES provide an insight on the effect of aggressive behavior in adolescents as a single variable, research was needed to identify

how these factors contextually, are associated with adolescent behavior (Chainey & Burke, 2021).

The Parental Acceptance-Rejection Theory (PARTheory), developed by Robert P. Rohner in 1980, attempts to answer fundamental questions regarding causes and consequences of rejection from attachment figures, and how they affect human development, throughout the lifespan. It is divided into three subtheories: personality subtheory, coping subtheory, and sociocultural subtheory (Rohner, Khaleque, & Cournoyer (2012). According to this theory, humans require acceptance and warmth from attachment figures (parents, caretakers, partners. Collectively, the subtheories depicted in PARTheory, are the foundation of perceived acceptance or rejection (warmth dimension). Parental personality and sociocultural factors, have an impact on the ways in which individuals identify with and execute parental behaviors. This in turn indicates to the child how to behave; demand more attention, model similar behavior, coping abilities, and expect further acceptance or rejection from future attachment figures (Rohner, Khaleque, & Cournoyer, 2012).

Chapter 3: Research Method

This study focused on identifying the significance of SES and parental neglect in the development and persistence of aggression in adolescents. The study aimed to provide information on how these factors together (SES and parental behavior) are associated with adolescent behavior (see Chainey & Burke, 2021). The nature of this study was quantitative with a nonexperimental correlational design using a binary logistic regression. The primary question to be answered for this study was the following: Based on categorical predictors, how does parental neglect and domicile neighborhood predict the likelihood of aggressive behavior in adolescents? The results of this study may provide education and insight to clinicians and other mental health care professionals, parents/caretakers, and educators regarding how SES influences parental behavior and adolescents' behavior differently. Results may inform appropriate consultation measures, proper case conceptualization, and more accurate diagnosis and treatment of behavioral problems in adolescents.

Research Design and Rationale

The nature of this study was quantitative with a nonexperimental correlational design using a binary logistic regression. Binary logistic regression allows the researcher to predict the probability that one dependent variable (in this case adolescent aggression) is influenced by multiple independent variables (in this case parental neglect and SES). Objective ratings of parental rejection/acceptance and SES, and how they influence the categorical predictor (moderate to high aggressive tendencies compared to no to mild aggressive tendencies) may provide a better understanding of the individual and

contextual effects on the dependent variable (see Wuensch, 2014). The variables for the current study were operationalized using three questionnaires designed to measure parental neglect, SES, and adolescent aggression administered to participants.

Nonexperimental research allows the researcher to conduct the study while it naturally occurs, without manipulation of environment or variables. A nonexperimental design was appropriate for the current study because the focus was predicting the likelihood of behavior based on relationships of multiple variables. Correlational research is the most common type of nonexperimental research, and considers the statistical relationship between variables without control of those variables. Nonexperimental designs can be less time-consuming than other designs; although the researcher cannot control the environment, replication of study may be achieved with little complication. However, because manipulation of variables cannot be done, the researcher must rely on interpretation of instruments and observations to accurately report findings (see Seltman, 2018).

Methodology

Population

The target population for this study was parents/caregivers of adolescents. For the purpose of this study, adolescents were defined as individuals in the age group of 12–18. I sought to recruit 110 participants, 55 of whom reported no to low levels of aggression (Group 1) and 55 of whom reported moderate to high levels of aggression (Group 2), in the United States. To examine the relationship between parental neglect, SES, and adolescent aggression, assigning Group 1 (no to low aggression) and Group 2 (moderate

to high aggression) was necessary because it strengthened my ability to allow to draw conclusions. This would also allow other researchers to replicate the study.

Sampling and Sampling Procedures

A sample size of 110 parents of adolescents age 12–18, 55 of whom reported moderate to high aggressive complaints 55 of whom reported no to low aggressive complaints, was considered. Other demographics such as parents/caregivers' age and sex were recorded but were not used a reason for exclusion. Parents who identified as high, middle, and low class were considered because previous research described an unclear distinction between higher middle class, lower middle class, and lower class (Fry & Kochhar, 2016).

Parents of adolescents who had been diagnosed with a neurodevelopmental disorder, such as attention deficit hyperactivity disorder, autism spectrum disorder, or learning disorders, were excluded from the study because behavioral concerns may have been secondary to the disorder or medication use. Similarly, participants whose adolescents had been diagnosed with behavior or personality disorders, in which symptomology included aggression, were also disqualified for the study.

Misdiagnosis or lack of appropriate intervention has the potential to increase problematic behavior and stigmatization that may be irreparable and carry into adulthood (Doom et al., 2015). The current study was positioned to create social change in the way people view the causes and effects of aggression in adolescents, as well as treatment in externalizing behavior. Therefore, I determined that the inclusion of those with neurodevelopmental and/or behavioral or personality disorders may be problematic.

To ensure participants met the inclusion criteria, I used a short questionnaire in SurveyMonkey:

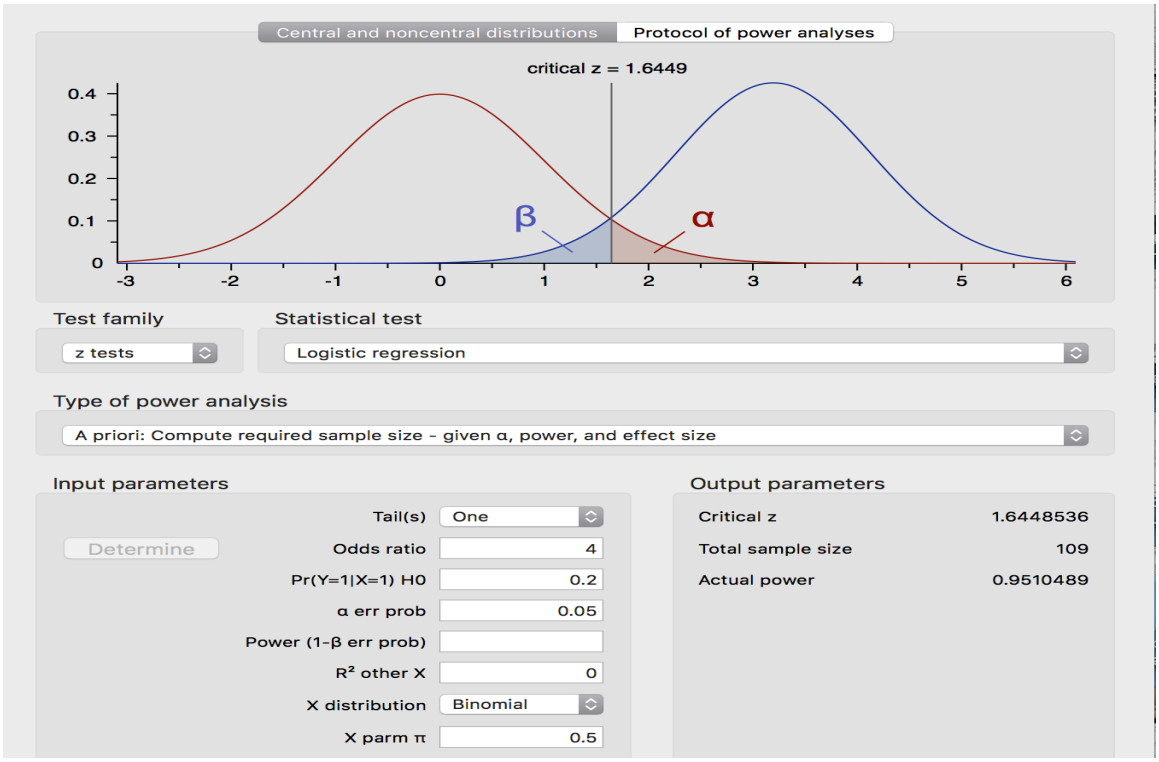
1. Are you the parent or guardian of a child between the ages of 12 and 18?
2. Has your child ever been formally diagnosed with a developmental or behavioral disorder by a licensed health care provider?

To qualify, prospective participants needed to answer "yes" for Question 1 and "no" for Question 2.

To determine the appropriate sample size for this study, I conducted a power analysis using G*Power. G*Power is a software program used to calculate the statistical power of a study. G*Power allows the researcher to calculate a suitable sample based on variables used in the study (Heinrich-Heine-Universitat Dusseldorf, 2021). G*Power's determination of minimum sample size is shown in Figure 5.

Figure 5

*G*Power's Determination of Minimum Sample Size for This Study*



Note. Data retrieved from G*Power 3.1 (2021).

G*Power was set to test logistic regression. The type of power analysis being performed was noted to be an a priori analysis. I chose one tail (one direction). The value of significance level (α err prob.) of .05 was the default setting and was deemed appropriate for this study. The study included two independent variables; therefore, a binomial x distribution was used. Binary logistic regression falls under *z*-test families. The critical *z* of 1.64 (standard deviations from the null), and estimated actual power (1-β err prob.)

of 0.9510489 were acceptable. The minimum sample size of 109 was recommended. However, I determined that the numbers of participants in each group should be equal, with a final sample size of 110.

Procedures for Recruitment, Participation, and Data Collection

Participants included for this study were parents or caretakers of adolescents living in the United States age 12–18. The study concentrated on aggression in adolescents; however, it was necessary to have a Group 1 (low to no aggression) and Group 2 (moderate to severe aggression) for reliable comparison of data and to rule out other internal and external factors. Recruitment was done through email flyers and social media groups using a stratified sampling technique. Other demographics such as parent/caretaker age and sex were recorded but were not used as a reason for exclusion. Personal and sensitive demographics were not included in the study. Parents who classified as high, middle, and lower class were considered because previous research described an unclear distinction between higher middle class, lower middle class, and lower class (Fry & Kochhar, 2016).

Parents of adolescents who had been diagnosed with a neurodevelopmental disorder, or adolescents who had been diagnosed with behavior or personality disorders in which symptomology included aggression, were disqualified from the study. To ensure participants met the inclusion criteria, I used a short questionnaire in SurveyMonkey.

Informed consent consisted of a written document explaining voluntary participation, purpose of study, duration of questionnaire, foreseeable risks, and expected benefits (see University of Michigan, 2021). Walden University Institutional Review

Board (IRB) approval was provided prior to data collection (IRB #06-28-23-0640774). After completion of the study, participants were offered family counseling or other resources related to parenting, aggression in children, or community resources, if needed. Data for this study were collected through three short questionnaires that were administered via email or telephone using the PARQ short form, the CAMS, and the MacArthur Scale of Subjective Social Status.

Instrumentation and Operationalization of Constructs

The content of this study's questionnaire (parent report) consisted of three separately published instruments combined into one questionnaire that measured parental rejection (neglect), SES, and adolescent aggression. The PARQ was developed by Rohner in 1984 and revised in 2004. The CAMS subscale of Children's Emotion Management Scale (CEMS) was developed by Zeman et al. in 2001. The Socioeconomic Status Ladder subscale of the MacArthur Scale of Subjective Social Status was developed by Adler et al. in 2000.

Parental Acceptance-Rejection Questionnaire

The PARQ was selected due to its alignment with the study's theoretical foundation, PARTheory (Rohner, 1980). The PARQ was appropriate for this study because it was perception based, cross-culturally tested, and considerate to the desired population; also, it provided subsections for two of the studies variables: adolescent aggression and parental neglect (see Rohner, 2004). The PARQ short form (parent report) consists of 24 items measured on a 4-point Likert-type scale. Participants were instructed to provide their first impression of each question on how they treated their child: *almost*

always true, sometimes true, *rarely true*, or *almost never true*. The PARQ short form concentrates on four areas: (a) warmth/affection, (b) hostility/aggression, (c) indifference/neglect, and (d) undifferentiated rejection. Questions are scored as follows: *almost always true* (4), *sometimes true* (3), *rarely true* (2), and *almost never true* (1). With the exception of Questions 7, 14, and 21, which are reverse scored, Table 1 shows the possible scores for the PARQ (see Rohner, 2020).

Table 1

Lowest and Highest Possible Scores on the PARQ and PARQ Midpoints

Scale/Total Test	Standard form (lowest)	Standard form (highest)	Standard form (midpoint)	Short form (lowest)	Short form (highest)	Short form (midpoint)
Warmth/affection	20	80	50	8	32	20
Hostility/aggression	15	60	37.5	6	24	15
Indifference/neglect	15	60	37.5	6	24	15
Undifferentiated rejection	10	40	25	4	16	10
Total PARQ score	60	240	150	24	96	60

Note. The table was derived from the PARQ test manual (Rohner, 2020).

Cronbach's coefficient alpha was used for the initial test/retest reliability of the PARQ. Since 1977, when the PARQ was first introduced, it has been used in approximately 400 studies, internationally. By 2000, the PARQ had been shown to be both valid and reliable, with 51 studies meeting criteria of sufficient evidence. A coefficient alpha measures the internal consistency of items within a scale. Higher alphas indicate relationship of items. Test/retest reliability relates to the questionnaires immutability over time. The PARQ reliability coefficients (alphas) range from version and year, with validation study from .83 to .96, and a median reliability of .91. Measures

of reliability, along with measures of discriminant and convergent validity in these studies showed the instrument to be sound (Rohner, 2020).

The PARQ is intended for children and adolescents, who are still under the care of an adult. Although the cap age is unclear, a meta-analysis on the reliability of the standard PARQ included children ages 6-19. Permission letter from developers to use intended instrument may be found in Appendix A.

Children's Anger Management Scale

The CAMS, subscale of the Children's Emotional Management Scales (CEMS) was specifically selected as it tests for children's aggression, by parent's report, is a short form, as well as an additional validity measure for aggressiveness in children. The entirety of the CEMS questionnaire consists of the anger subscale, sadness subscale, and worry subscale (Zeman, Shipman, & Suveg, 2010). The ladder two were not selected as they did not apply to the study. The CEMS was developed by Janice Zeman, Kimberly Shipman, & Cynthia Suveg in 2001. The measure was originally intended for children and adolescence report of dysregulation, and was later adapted for parent report.

The CAMS are an 11-item questionnaire, that uses a 3-point Likert-type scale, ranging from *hardly ever* (1), *sometimes* (2), and *often* (3). Items 1, 3, 8, & 10 are related to regulation/dysregulation; items 2, 5, 7, & 11 are related to internalizing; items 4, 6, & 9 are related to externalizing. Items range in scoring from 3-9. Higher scores on the CAMS reflect higher levels of anger. The CEMS/CAMS is not constrained and can be found at rand.org. There is no permission requirement for this scale. Initial reliability and validity were established through a community sample of 227 fourth and fifth grader self-

report; maternal report N=171; peer ratings of behavior N=227. A strong internal consistency alpha (moderate) was found for the CEMS, using a three-factor solution. Alpha ranged from 0.68 to 0.73 for the three subscales. The CEMS has been used in prior studies in children and adolescents. Reliability and validity have been established in both children and adolescents (Zeman, Shipman, & Penza-Clyve, 2001). A study conducted by McLaughlin, Hatzenbuehler, & Nolen-Hoeksema (2021) on emotion dysregulation and adolescent psychopathology (N=1065), CAMS (Time 1 a=0.56, Time 2 a=0.66), demonstrating adequate reliability.

MacArthur Scale of Subjective Social Status

The Socioeconomic Status Ladder (SSS), subscale of the MacArthur Scale of Subjective Social Status, was created by Nancy Adler and team in 2000. This measure is intended for adults, and selected for this study, as it is a 1 question item, which allows an individual to determine their place in society (SES). The respondent is presented with an illustrated, 9-rung ladder and asked to rank their place by marking an X on the appropriate rung. This questionnaire is perception based and appropriate for the studies population (Adler, Epel, Castellazzo, & Ickovics, 2000). The second subscale, The Community Ladder subscale, was omitted, as it did not apply to this study.

Participants were instructed: Think of a ladder with 10 steps representing where people stand in the United States. At step 10 are people who are the best off – those who have the most money, the most education, and the most respected jobs. At step 1 are the people who are worst off – those who have the least money, least education, and the least

respected jobs or no job. Where would you place yourself on this ladder? (Operario, Adler, & Williams, 2004). Below, in Figure 6 are category examples for the SSS.

Figure 6

Criteria Examples for MacArthur Scale of Subjective Social Status

Chart 1. Prototypes for the MacArthur society (general) ladder, ELSA-Brasil.

Bottom	Middle	Top
WORSE JOBS: have jobs: worse, without stability, without security; have *informal underpaid job*; or without job; less job offers;	AVERAGE JOBS: have jobs: average, reasonable, satisfactory, better and formal; or have access to and search for jobs; are *employees*: average public or perhaps high-level;	BETTER JOBS: have jobs: better, stable and important; more jobs (offers); are big *businessmen*: businessmen who have schooling, many or some of them; are big *politicians*;
LOWER LEVEL OF SCHOOLING: have less/little/or do not have *education/schooling*; fundamental level of schooling; do not have/ did not have *education* or *access* to education; have less/lower level of *training*;	AVERAGE LEVEL OF SCHOOLING: have secondary *education*; or better access to education today; have *schooling*; a little schooling; completed only normal schooling;	HIGHER LEVEL OF SCHOOLING: have more/better *training*; privileged training; have *PhD*; have/did *degree/post-graduate degree*; have much/higher level of *study*; although practically the majority did not study; have much/ higher level of *schooling;* but also some do not have much schooling; have a lot of *knowledge;* also some have little knowledge;
LOWER INCOME: have worse/ lower *salaries*; less than one or two minimum salaries; low salary; or no salary; have very little /do not have *money*; have low *income*; or do not have income;	AVERAGE INCOME: have/earn *salaries*: medium; "get by" with little salary;	HIGH INCOME: have/earn a lot of/ more *money*; have higher *salaries*;
WORSE LIVING CONDITIONS: have poor/lost their *health*; do not have private health; do not have health to earn his/her own living; have/had less/few *opportunities*; do not have *food security* or have no job; without *housing*; do not have their own home; are *street dwellers*; or live on the street; do not have/did not have *access* to things.	AVERAGE LIVING CONDITIONS: are from the middle *class:* formerly middle, lower or middle class; reach better *positions* and climbed to better positions; have average purchasing and political *power*; may reach "the top"; achieved a certain *status*; are from the *in-crowd:* average and from the judiciary; have *life*: moderate, dignified, stable and improvable; have *leisure* conditions.	BETTER LIVING CONDITIONS: have a lot of/more *power*: political, purchasing, economic and of persuasion; are from high *society*, have important ("central") jobs; have a lot of/more *prestige;* social prestige; some because they *deserve* it/other not.

Note. Figure 6 was obtained from the SSS study by Ferreira et al. (2016).

The MacArthur Scale of Subjective Social Status/Socioeconomic Status Ladder is not constrained and can be found at sparqtools.org. There is no permission requirement for this scale. Although the SSS is a single item questionnaire, it has been shown cross culturally, to be a good indicator of SES. This in part is due to its subjective nature. Research on subjective vs objective scales of SES found that subjective scales, such as the SSS have a higher participation rate than objective SES scales, as some respondents were either unsure of their SES, or did not want to report their income (sparqtools.org, 2001).

The SSS has been used in many studies, most commonly in relation to SES and health and cross culturally; African-American, Asian-American, Chinese-American, Mexican-American, Pacific Islanders. Test/retest of the SSS was established through Spearman's Rank-Order Correlation. The Spearman correlation coefficient, r_s, measures ranks between variables. A higher value indicates strengths in association, where lower values indicate weaker association between variables. Spearman's rank-order correlations between baseline and follow-up ladders indicated adequate test/retest reliability, with a significant correlation coefficient of $p= 0.62$ ($p <0.01$). (Adler, 2004). Below, in Figure 7 are the coding criteria from the study; these categories will also be used in this study.

Figure 7

Coding Criteria for Socioeconomic Status

Objective SES Traditional SES indicators included family income and personal education level, and were measured only at baseline. Family income was coded into seven categories:

(1) $15 000 or less (8.9%);
(2) $15 001–25 000 (12.6%);
(3) $25 001–35 000 (16.0%);
(4) $35 001–50 000 (24.3%);
(5) $50 001–75 000 (18.9%);
(6) $75 001–100 000 (8.7%); and
(7) over $100 000 (10.5%).

Education level was coded into three categories: (1) less than high school (8.8%); (2) high school diploma, GED, or some college (52.7%); and (3) college diploma or higher (38.5%).

Note. These coding data were obtained from Adler (2004).

Data Analysis Plan

G*Power was used to determine sample size needed for this study. G*Power estimated sample size of 109; However; the researcher determined that study participants should be equal, with a final sample size of 110; 55 group 1 (low to no aggression), and 55 group 2 (moderate to high aggression). The content of the study's questionnaire consisted of three separately published instruments, combined into one concise tool, that measured parental rejection (neglect), socioeconomic status (SES), and adolescent aggression. IBM SPSS Statistics Version 29.0, a powerful, highly accurate, and high quality software system, (IBM.com, n.d.) was used to determine statistical data analysis and interpretation.

Data cleaning and screening was done before information was added to SPSS. The researcher checked each questionnaire for any missing information that would skew

data analysis. These questionnaires were not added to SPSS. The researcher utilized binary classification, a cleaning process that allowed data from the questionnaires, to be properly added and interpreted within SPSS. There were three categories; parental neglect, the first predictive variable (C1); SES the, second predictive variable (C2); adolescent aggression, the response variable (C3). Parental neglect, yes or no; SES; high, high middle, low middle, low; adolescent aggression, yes or no. Table 2 shows the categorical sequence of variables for this study.

Table 2

Categorical Sequence of Variables

C1: parental neglect	C2: SES	C3: adolescent aggression
0 = no	1 = high	0 = no
1 = yes	2 = high mid	1 = yes
	3 = low mid	
	4 = low	

Note. This table was created for example purposes only; it does not reflect actual participant responses.

In SPSS, the researcher used a binary logistic regression, a type of multiple regression, which allowed the examination of strengths of relationships, using one dependent variable (adolescent aggression), and multiple independent variables (parental neglect and SES). Multiple regression was specifically chosen for its ability to examine multiple independent variables. The binary logistic regression model was further sought, for its ability to predict the influence of multiple independent variables, on a single dependent variable. This data analysis was most appropriate to answer the following question:

RQ: Based on categorical predictors, how does parental neglect and domicile neighborhood, predict the likelihood of aggressive behavior in adolescents?

H_o: Based on categorical predictors, there is no statistically significant relationship between parental neglect, domicile neighborhood, and the likelihood of aggressive behavior in adolescents.

H_a: Based on categorical predictors, there is a statistically significant relationship between parental neglect, domicile neighborhood, and the likelihood of aggressive behavior in adolescents.

The two predictor (independent) variables were tested in one block, as they were used to predict the likelihood of the response (dependent) variable. Chi-square analysis was used to statistically test whether the predictor variables would be significant (-2LogL /goodness-of-fit test), in which higher numbers suggest poor fit (<.2 strong relationship, .2-.3 moderate relationship, >.3 poor relationship). Wald statistic was selected to test the contribution of individual variables; Wald was distributed in accordance with chi-square. Results from actual questionnaires (scoring and interpretation) were included, in addition to statistical analysis (see Statistics Solutions 2021). When we are predicting the likelihood of behavior, the probability of behavior occurring must also be calculated. The probability that the behavior will occur is defined by a (p) value; as p increases, the odds of the behavior increase, for example p=0.5 (low probability), p=0.99 (high probability). Similarly, as the p value increases, the odds ratios increase (see Bartlett, 2015).

Threats to Validity

External Validity

External validity relates to the studies structure, how it is conducted, and consequently, its transferability in other settings, or its generalization (Cunic, 2021). As this study allowed participants to respond to the questionnaire in an uncontrolled environment (not controlled by researcher), this could have potentially effected participant's attention and concentration. While the environment is uncontrolled, the researcher made every effort to ensure valid responses; participants were instructed to consider taking questionnaire in a quiet location, where they would not be disturbed during the duration of the questionnaire, or to consider taking the questionnaire when this was feasible.

Internal Validity

Internal validity refers to the confidence of cause and effect in findings related to variables being tested. Confounding or extraneous factors must be eliminated in order to deduce a causal relationship between variables (see Cunic, 2021). Factors that could threaten internal validity may be related to attrition and instrumentation. Due to the length of the original questionnaire, approximately 72 items, this has the potential of causing mental/cognitive fatigue, which could inevitably have effected test performance (see Ackerman & Kanfer, 2009). In order to minimize potential mental/cognitive fatigue and test performance, the researcher chose to utilize short forms, which reduced length of questionnaire to 36 items. The researcher employed information on increasing response rate through SurveyMonkey; respondent motivation and cognitive dissonance

(surveymonkey.com, 2024). The researcher also considered other confounding or extraneous factors, and made respective efforts to reduce them; refer to section on procedures for recruitment, participation, and data collection.

Ethical Procedures

Institutional permission to conduct the research needed for this study was obtained before participants are considered, through the Institutional Review Board (IRB), approval #06-28-23-0640774. The IRB's role is to protect the rights, welfare, and safety of human subjects. The IRB holds ascendancy to approve, require researcher to make modifications, or to disapprove research. Consideration of protection to human research subjects is vital not only before study begins, but periodically throughout, and after the study has ended (FDA, 1998). The researcher completed the institutes appropriate ethics approval forms before participant inclusion, as well, provided the application documents and approval numbers in the completed study. SurveyMonkey was selected to determine inclusion/exclusion of participants, as well the amalgamation of questionnaires. It is a well-known and respected data analysis platform used by universities and companies. Participant information was kept secure, with minimal attrition due to the survey's construction (forced choice questions), as well as notifying the researcher of percentage of respondent's completion x respondents needed (surveymonkey.com, 2024). While SurveyMonkey assists in the promotion of survey completion, the participants were notified of ability to refuse or discontinue survey at any time.

Other ethical issues were considered. This study did not include participants in the researchers work environment. There was no potential conflict of interest as the researcher had no affiliation with participants prior to the study. The researcher was cognizant of possible power differential; However; the study was designed to be neutral, fair, and subjective. Participants only had access to their own survey. Participant demographics were kept confidential, in accordance with the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act (HIPAA) guidelines. Participant information was stored on a password protected device, that only the researcher had access to. The study procedures ensured that participant identity would not directly or indirectly be disclosed. Participant records and responses will be destroyed five years after completion of study.

Summary

This chapter described the research design and methodology that were used to determine the relationship between adolescent aggression, parental neglect, and SES. The research design chosen for this study was non-experimental, correlational research. The study was quantitative in nature, using binary logistic regression, through IBM SPSS statistic software. Binary logistic regression was most appropriate, as the study consisted of one dependent variable (adolescent aggression), and two independent variables (parental neglect and SES). Additionally, G*Power was used to retrieve appropriate sample size for this study; group 1, 55 participants reporting low to no aggression; group 2, 55 participants reporting moderate to high aggression.

Three separate published questionnaires were used for this study, that researcher incorporated into one concise Likert point questionnaire, using SurveyMonkey. An in-depth explanation of recruitment process, instrumentation, and intended population was examined. Data analysis plan, and threats to both internal validity (confidence in relationship) and external validity (transferability and generalizability) were defined and discussed. Ethical procedures have been carefully considered. The researcher considered privacy acts related to both education (FERPA) and medical information (HIPAA) laws. Chapter IV will summarize the findings of the statistical analysis, described in this chapter.

Chapter 4: Results

The purpose of this study was to examine the relationship between SES, parental neglect, and aggression in adolescents. Because many factors may be related to the development of aggression in adolescents, this study aimed to consider SES, defined as the combination of feelings of domicile and neighborhood safety, financial stability, and educational and occupational experience (APA, 2019), and its effect on parental neglect, defined as the lack of emotional response, indifference, withdrawal, or other physical and psychological support (Khaleque, 2014), and aggression in adolescents, defined as a pattern of impulsive, disruptive, destructive, defiant, physical, or verbal harm to self or others (Siever, 2008). Although previous studies on parental behaviors or SES provided insight on the effect of aggressive behavior in adolescents as a single variable, research was needed to identify how these factors contextually are associated with adolescent behavior (Chainey & Burke, 2021).

The previous chapter described the research design and methodology that was used to determine the relationship between adolescent aggression, parental neglect, and SES. This chapter presents the findings of the statistical analysis. The primary question for this study was as follows:

RQ: Based on categorical predictors, how does parental neglect and domicile neighborhood predict the likelihood of aggressive behavior in adolescents?

H_o: Based on categorical predictors, there is no statistically significant relationship between parental neglect, domicile neighborhood, and the likelihood of aggressive behavior in adolescents.

H_a: Based on categorical predictors, there is a statistically significant relationship between parental neglect, domicile neighborhood, and the likelihood of aggressive behavior in adolescents.

Data Collection

Participants considered for this study were parents or caretakers of adolescents living in the United States age 12–18. The study concentrated on aggression in adolescents; however, it was necessary to have a Group 1 (low to no aggression) and Group 2 (moderate to severe aggression) for reliable comparison of data and to rule out other internal and external factors. Recruitment was done through email flyers and social media groups using a stratified sampling technique. Other demographics such as parent/caretaker age and sex were recorded but were not used a reason for exclusion. Personal and sensitive demographics were not included in the study. Parents/caretakers who identified as high, middle, and lower class were considered because previous research described an unclear distinction between higher middle class, lower middle class, and lower class (Fry & Kochhar, 2016).

Parents of adolescents who had been diagnosed with a neurodevelopmental disorder or whose adolescents who had been diagnosed with behavior or personality disorders in which symptomology included aggression were excluded from the study. To ensure participants me the inclusion criteria, I used a short questionnaire in.

Informed consent consisted of a written document explaining voluntary participation, purpose of the study, duration of the questionnaire, foreseeable risks, and expected benefits (see University of Michigan, 2021) before data collection began. After

the study, participants were offered family counseling or other resources related to parenting, aggression in children, or community resources, if needed. Data for this study were gathered using three separately published instruments combined into one concise tool that measured parental rejection (neglect), SES, and adolescent aggression, and were administered via email or telephone: The PARQ short form, the CAMS, and the MacArthur Scale of Subjective Social Status. No significant alterations were made to the original instruments.

G*Power was used to determine the minimum sample size needed for this study. G*Power calculated a sample size of 109; however; I determined that the number of participants in each group should be equal, with a final sample size of 110: 55 in Group 1 (low to no aggression) and 55 in Group 2 (moderate to high aggression). The projected sample size in SurveyMonkey was 250 responses. I considered incomplete responses and participants not satisfying inclusion criteria, and determined that a minimum sample size of 250 (125 in Group 1 [low to no aggression] and 125 in Group 2 [moderate to high aggression]) would allow for discrepancies. The study was begun on November 5, 2023, and closed on May 20, 2024, with a total response rate of 268. After collecting the data, I examined each questionnaire and found 18 surveys that were incomplete or abandoned. This was due to skipping one or more questions, with Question 33 being the most skipped; no participants were initially disqualified from the study because inclusion requirements were addressed at the beginning of the study, in addition to the IRB approved consent form. Figure 8 shows participants' location across the United States,

Figure 9 shows survey responses by month, and Figure 10 shows data collection information.

Figure 8

Participant Location in the United States

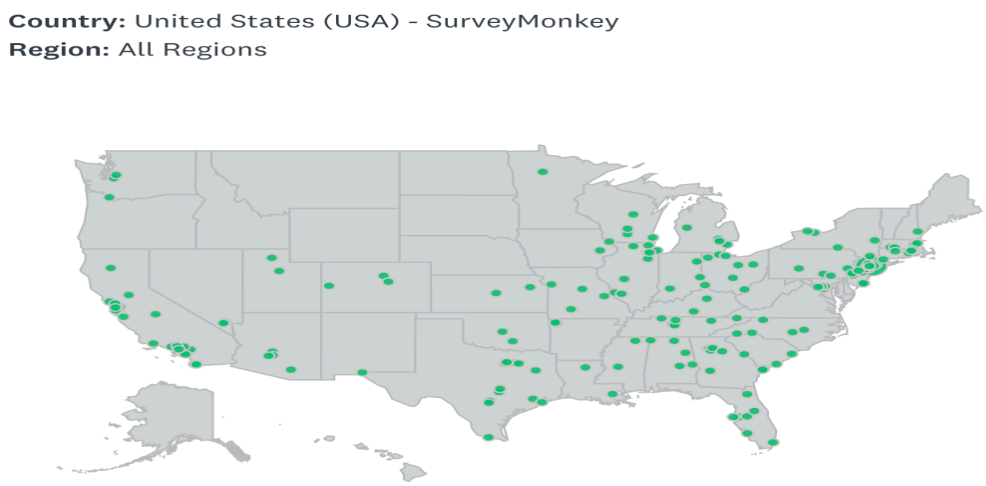


Figure 9

Survey Responses by Month

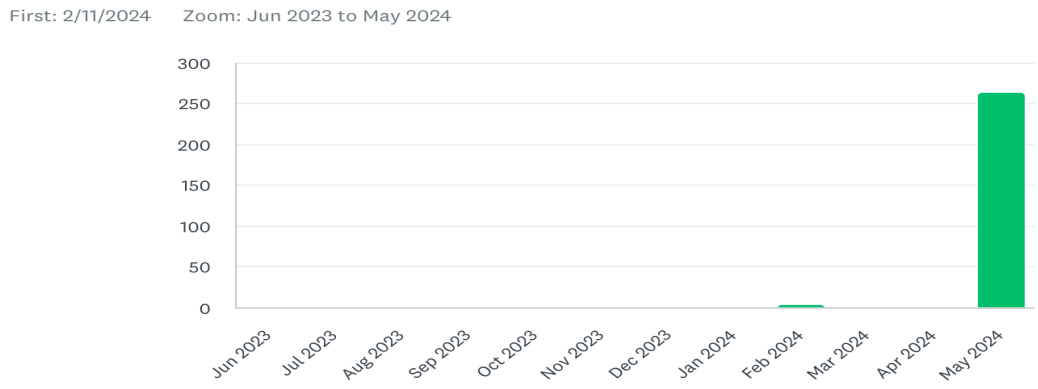
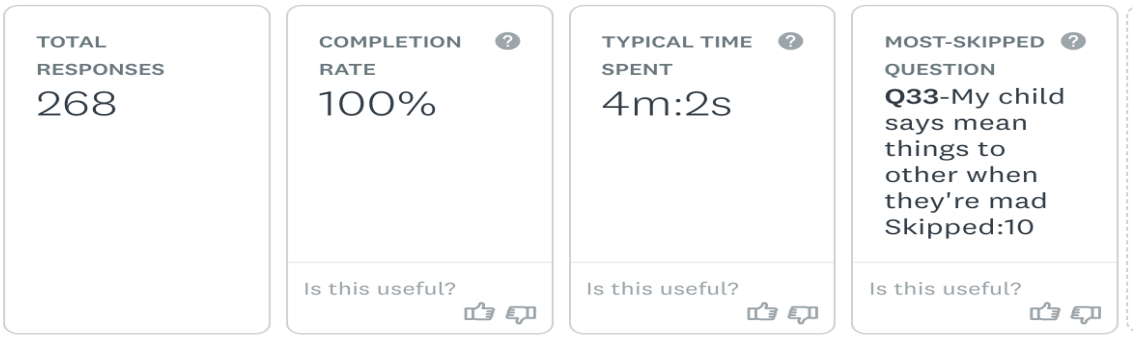


Figure 10

Study Insights



Results

IBM SPSS Statistics Version 29.0, which is a powerful, highly accurate, and high-quality software system (IBM, n.d.), was used to conduct statistical data analysis and interpretation. Binary logistic regression was used for this study. Binary logistic regression allowed me to determine the probability that one dependent variable (adolescent aggression) was influenced by multiple independent variables (parental neglect and SES). Objective ratings of parental rejection/acceptance and SES, and how they influence the categorical predictor (moderate to high aggressive tendencies compared to no to mild aggressive tendencies) may provide a clearer understanding of the individual and contextual effects on the dependent variable (see Wuensch, 2014). After cleaning and screening for incomplete survey responses, I coded Group 1 (low to no aggression) as Adolescent_Aggression 0, and Group 2 (moderate to high aggression) as Adolescent_Aggression 1. Adolescent aggression was the dependent variable or constant. Parental neglect (first independent variable) was coded as Parental_Neglect, with 0 indicating unremarkable or no neglectful tendencies and 1 indicating significant

neglectful tendencies. SES (second independent variable) was coded as SES with 1.00 indicating high SES, 2.00 indicating high middle SES, 3.00 indicating low middle SES, and 4.00 indicating low SES. Figure 11 shows the results of the logistic regression.

Figure 11

Case Processing Summary

Logistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	250	100.0
	Missing Cases	0	.0
	Total	250	100.0
Unselected Cases		0	.0
Total		250	100.0

a. If weight is in effect, see classification table for the total number of cases.

The case processing summary illustrates that there were 250 total respondents. There were no missing cases in the final data set because they were removed in the filtering stage. Only cases in which all dependent and independent variables were complete were included in the analysis. Figure 12 shows the results of the omnibus tests of model coefficients.

Figure 12

Omnibus Tests of Model Coefficients

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	118.528	2	<.001
	Block	118.528	2	<.001
	Model	118.528	2	<.001

The chi-square test is used to show whether a model, with all predictors included, is significant in predicting the likelihood of an occurrence; in this case, the model was adolescent aggression, and the predictors were parental neglect and SES. Because the chi-square value was large and the *p* value was less than 0.001, the result was highly significant. This indicates that this model, as a whole, fit the data better than an intercept-only model, meaning the predictor variables (parental neglect and SES) were significantly associated with adolescent aggression. Figure 13 shows the model summary.

Figure 13

Model Summary

Model Summary

Step	−2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	223.938[a]	.378	.506

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

The -2 log likelihood or deviance of 223.938 was a measure of how well the model explained variations in outcome of interest, or model fit, with lower values indicating a better fit. The Cox & Snell *R* square of 0.378 and the Nagelkerke *R* square of

0.506 indicated the proportion of variance in adolescent aggression that was explained by the predictors: parental neglect and SES. Nagelkerke R^2 indicated that 50.6% of the variance in adolescent aggression was explained by the model. This indicated a relatively strong model fit because values above 0.5 in logistic regression are often considered good. Figure 14 provides the classification table.

Figure 14

Classification Table

Classification Table[a]

Observed			Predicted Adolescent_Agression 0	1	Percentage Correct
Step 1	Adolescent_Agression	0	131	10	92.9
		1	33	76	69.7
	Overall Percentage				82.8

a. The cut value is .500

Predicted vs. Observed Classification for Adolescent Aggression: The classification table provides insight into the model's accuracy in classifying cases of aggression (1) and no aggression (0) based on a probability cutoff of 0.5. For no aggression (0): the model correctly classified 92.9% of cases (131 out of 141). For aggression (1): The model correctly classified 69.7% of cases (76 out of 109). Overall classification accuracy = 82.8%: The model correctly classified aggression status (0 or 1) for 82.8% of all cases. This indicates good overall accuracy, though it's worth noting that accuracy can sometimes be affected by the balance between classes. Figure 15 shows the variables in the equation.

Figure 15

Variables in the Equation

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B) Lower	Upper
Step 1[a]	Parental_Neglect	3.435	.393	76.221	1	<.001	31.024	14.349	67.079
	SES	.315	.198	2.520	1	.112	1.370	.929	2.020
	Constant	-2.119	.519	16.684	1	<.001	.120		

a. Variable(s) entered on step 1: Parental_Neglect, SES.

Parental Neglect

B = 3.435: This is the log-odds coefficient for parental neglect. A positive coefficient means that parental neglect is associated with an increase in the likelihood of adolescent aggression. Wald = 76.221, Sig. <.001: The Wald statistic and p-value indicate that this effect is highly statistically significant, meaning there is strong evidence that parental neglect is associated with adolescent aggression. Exp(B) = 31.024: This is the odds ratio. Adolescents experiencing parental neglect are about 31 times more likely to exhibit aggression compared to those who are not neglected, holding SES constant. 95% C.I. for Exp(B) = [14.349, 67.079]: The confidence interval for the odds ratio is quite wide but well above 1, which reinforces the strong positive association between parental neglect and adolescent aggression.

Socioeconomic Status

B = 0.315: This positive coefficient suggests that higher SES may slightly increase the likelihood of aggression, though this effect is not statistically significant. Wald = 2.520, Sig. = .112: The p-value is greater than 0.005, indicating that SES is not a statistically significant predictor of adolescent aggression in this model. Exp(B) = 1.370:

This odds ratio suggests that for each unit increase in SES, the odds of aggression increase by about 37%. However, because this result is not statistically significant, we cannot conclude a meaningful association based on this model. 95% C.I. for Exp(B) = [0.929, 2.020]: The confidence interval includes 1, which indicates uncertainty about whether SES truly affects aggression risk.

Constant (Intercept)

B = -2.119, Exp(B) = 0.120: The intercept's value reflects the log-odds of aggression when all predictors (parental neglect and SES) are zero. Sig. <.001: The intercept is statistically significant, indicating that the baseline probability of aggression (when both predictors are at zero) is not zero. Figure 16 shows goodness of fit test.

Figure 16

Hosmer and Lemeshow Test

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	.532	4	.970

Chi-square = 0.532, Sig. = 0.970: This test assesses the model's goodness of fit. A *p*-value greater than 0,05 suggests that the model's predicted probabilities fit the observed data well. Here, the high *p*-value (0.970) indicates an excellent fit, meaning the model's predictions align closely with the actual data on aggression.

Summary

The purpose of this study was to examine the relationship between SES, parental neglect, and aggression in adolescents. The primary question for this study was as follows: Based on categorical predictors, how does parental neglect and domicile neighborhood, predict the likelihood of aggressive behavior in adolescents? Parents/caretakers of adolescents ages 12-18 were invited to participate. Inclusion/exclusion criteria was addressed during the start of the study within the IRB approved consent form. The study opened on 11/05/2023 and closed 05/20/2024. The original estimate of participants projected by G*Power was 109; when study was opened in November 2023, SurveyMonkey projected participant responses for this particular study to include 250. At the close of the study in May 2024, 268 responses had been collected; 18 were found to be missing information and could not be inputted into SPSS. IBM SPSS 29.0 was used to determine statistical data analysis and interpretation. Binary logistic regression was used for this study. Binary logistic regression allows to predict the probability that one dependent variable (adolescent aggression) is influenced by multiple independent variables (parental neglect and SES).

Two groups were utilized in order to predict the likelihood of parental neglect and SES on adolescent aggression: group 1: 125 reporting low to no aggression, was coded into SPSS as Adolescent_Aggression “0”; group 2: 125 reporting moderate to high aggression, was coded into SPSS as Adolescent_Aggression “1”. Adolescent aggression was the dependent variable or constant. Parental neglect (first independent variable) was coded into SPSS as Parental_Neglect, with “0” indicating unremarkable or no neglectful

tendencies and “1” indicating significant neglectful tendencies. Socioeconomic Status (second independent variable) was coded as SES with “1.00” indicating high SES, “2.00” indicating high middle SES, “3.00” indicating low middle SES, and “4.00” indicating low SES.

The summary interpretation indicates that parental neglect is a strong and significant predictor of adolescent aggression, with neglected adolescents being about 31 times more likely to show aggression. SES does not significantly predict aggression in this particular model, as its association with aggression is weak and statistically nonsignificant. The overall model is a good fit for the data (supported by the Hosmer and Lemeshow test) and provides a reasonable level of classification accuracy at 82.8%. Chapter 5 will include further analysis, interpretation, and details of the findings of this chapter. It will cover additional limitations to the study, future research considerations, and how this study may be benificial in postive social awareness and change.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to examine the relationship between SES, parental neglect, and aggression in adolescents. Because many factors may be related to the development of aggression in adolescents, this study aimed to consider SES, defined as the combination of feelings of domicile and neighborhood safety, financial stability, and educational and occupational experience (APA, 2019), and its effect on parental neglect, defined as the lack of emotional response, indifference, withdrawal, or other physical and psychological support (Khaleque, 2014), and aggression in adolescents, defined as a pattern of impulsive, disruptive, destructive, defiant, physical, or verbal harm to self or others (Siever, 2008). Although previous studies on parental behaviors or SES provided insight on the effect of aggressive behavior in adolescents as a single variable, research was needed to identify how these factors contextually are associated with adolescent behavior (Chainey & Burke, 2021).

The nature of this study was quantitative with a nonexperimental correlational design using a binary logistic regression. Binary logistic regression allows me to determine the probability that one dependent variable (adolescent aggression) was influenced by multiple independent variables (parental neglect and SES). Objective ratings of parental rejection/acceptance and SES, and how they influence the categorical predictor (moderate to high aggressive tendencies compared to no to mild aggressive tendencies) may provide a clearer understanding of the individual and contextual effects on the dependent variable (see Wuensch, 2014).

The results of this study may provide education and insight to clinicians and other mental health care professionals, parents/caretakers, and educators regarding how SES influences parental behavior and adolescent behavior differently. Results may inform appropriate consultation measures, proper case conceptualization, and more accurate diagnosis and treatment for behavioral problems in adolescents. Additionally, many adolescents diagnosed with a behavioral disorder such as oppositional defiant disorder or conduct disorder carry a stigma associated with the diagnosis, which further contributes to their behavioral problems. Mental health care professionals should consider how these behaviors and diagnosis affect the adolescent's long-term behavior and development.

Interventions in problematic behavior are most successful when the behavior is discovered and appropriate interventions are implemented. Misdiagnosis or a lack of appropriate intervention has the potential to increase problematic behavior and stigmatization, which may be irreparable and carry into adulthood (Doom et al., 2015). Parental behavior has been suggested to change as the adolescent's behavior changes, as seen in delinquent behavior. Many studies have shown that parents adjust their behavior as their adolescent's behavior changes (E. Lee et al., 2015). The current study may help parents consider strategies of effective and stable parenting related to positive adolescent outcome.

Clinicians and educators may consider behavior change (internalizing and externalizing) in different environments (school setting versus domicile setting) in regard to SES and parental neglect, and may determine when these patterns of behavior are most likely to occur and the cause of aggressive behavior. The current study is positioned to

create social change by considering the way in which people view the causes and effects of aggression in adolescents, as well as treatment in internalizing and externalizing behavior.

The current study results indicated that parental neglect was a strong and significant predictor of adolescent aggression, with neglected adolescents being about 31 times more likely to show aggression. SES did not significantly predict aggression within the model because its association with aggression was weak and statistically insignificant. The overall model was a good fit for the data (supported by the Hosmer and Lemeshow test) and provided a reasonable level of classification accuracy at 82.8%. This chapter includes further analysis, interpretation, and details of the findings presented in Chapter 4. Chapter 5 covers additional limitations to the study, future research considerations, and how this study may be benificial in promoting postive social change.

Interpretation of the Findings

The relationship between parental neglect, SES, and aggression in adolescents was examined by using questionnaires related to parental view of whether their adolescent showed aggressive behavior, parental acceptance, and perceived socioeconomic status. A sample of 250 parents of adolescents age 12–18, 125 of whom reported aggressive complaints and 125 of whom reported no aggressive complaints, were considered. Recruitment was done through email flyers and social media groups using a type of probability sampling known as stratified sampling. Data for this study were collected through three short questionnaires administered via email or telephone: The PARQ short form, the CAMS, and the MacArthur Scale of Subjective Social Status.

The PARQ short form is a 24-item questionnaire developed by Rohner 1980, that assesses an individual's relationship with their child. The questionnaire consists of four subscales, which include parental warmth/affection, hostility/aggression, indifference/neglect, and undifferentiated rejection (Khaleque & Rohner, 2001). The CAMS is an 11-item questionnaire that assesses perceived physical and verbal aggression in adolescents (Zeman et al., 2001). Lastly, the MacArthur Scale of Subjective Social Status is a single-item measure that assesses an individual's perceived rank in society (Stanford University, n.d.).

IBM SPSS Statistics Version 29.0, a powerful, highly accurate, and high-quality software system (IBM, n.d.) was used to conduct statistical data analysis and interpretation. Binary logistic regression was used for this study. Binary logistic regression allowed me to determine the probability that one dependent variable (adolescent aggression) was influenced by multiple independent variables (parental neglect and SES). Objective ratings of parental rejection/acceptance and SES, and how they influence the categorical predictor (moderate to high aggressive tendencies compared to no to mild aggressive tendencies) may provide a clearer understanding of the individual and contextual effects on the dependent variable (see Wuensch, 2014). After cleaning and screening the data for incomplete survey responses, I coded Group 1 (low to no aggression) as Adolescent_Aggression 0; and Group 2 (moderate to high aggression) as Adolescent_Aggression 1.

Adolescent aggression was the dependent variable or constant. Parental neglect (first independent variable) was coded Parental_Neglect with 0 indicating unremarkable

or no neglectful tendencies and 1 indicating significant neglectful tendencies. SES (second independent variable) was coded as SES with 1.00 indicating high SES, 2.00 indicating high middle SES, 3.00 indicating low middle SES, and 4.00 indicating low SES.

Parental Neglect and Adolescent Aggression

Findings of the logistic regression model were significant overall (chi-square = 118.528, $p < .001$), suggesting that the combination of parental neglect and SES significantly predicts adolescent aggression. The key predictor in this study was parental neglect (B = 3.435, $p < .001$) with a high odds ratio of Exp (B) = 31.024, which indicated that adolescents experiencing neglect were about 31 times more likely to exhibit aggression than those who were not neglected.

In previous studies, neglect was found to be the most common form of maltreatment. According to the U.S. Child Protective Services, over 78% of reports of maltreatment are due to neglect (Chainey & Burke, 2021).

These children and adolescents are also more susceptible to chronic neglect because this type of maltreatment has been shown to have multiple causes and elements; neglect has several origins such as stress caused by instability of finances, SES, and instable relationships, which affect the parent's ability to properly care for their children. Camilo et al. (2020) suggested that the more compromised the subsystems or elements involved, the higher the likelihood of child maltreatment. Over time, maltreatment can affect a child's ability to self-regulate emotions, and can increase probability of negative outcomes and delinquency (Logan-Greene & Jones, 2015).

Georgiou and Symeou (2018) stated that parental behavior is the most influential variable of overt and covert behaviors in children. Georgiou and Symeou considered the parent's involvement in a child's development and needs. Lack of involvement, or neglect, affects the child's ability to regulate emotions, behaviors, and the way in which they view others and form future relationships. Additionally, the parent's relationship with their adolescent sets the stage for social growth. Negative parental/adolescent relationships and interactions affect the way the adolescent internalizes other interactions, their independence, healthy attachment, and problem-solving abilities or conflict resolution. Children who have been neglected by their caretakers may develop a skewed sense of self in which they rely on others' opinions of them to determine self-worth (Talmon & Ginzburg, 2019).

The findings of the current study extend previous research and underscore PARThory's assertion that adolescents who percieve or experience rejection/neglect are more likely to exhibit maladaptive outcomes such as aggression. The high odds ratio suggests that neglect is not only a contributing factor but the dominant factor within this study, and a dominant variable in adolescent aggression overall.

Socioeconomic Status and Adolescent Aggression

SES did not significantly predict adolescent aggression (B = 0.315, p = .112). The association between SES and aggression was weak and nonsignificant. The odds ratio (Exp (B) = 1.370) indicated only a slight increase in aggression liklihood with higher SES, but this result was not statistically meaningful. Previous research on the effects of SES indicated a significant influence on the development of aggression in adolescents

within higher and lower class environments. Many studies determined that SES has a profound effect on a person' physical, psychological, and physiological health (APA, 2019).

SES is based on many factors such as income, occupation or trade, and education. According to Fry (2016) with Pew Research Center about 52% of the U.S. population is classified as middle class, 29% as lower class, and 19% as upper class. This was calculated based on city, state, household income before taxes, number of individuals in household, education level, age, race/ethnicity, and marital status. Although SES overall was not as statistically significant in the current study as parental neglect in the development of aggression in adolescents, previous research provided insight on the impact of SES on parental and adolescent aggression. Because previous research considered SES as a single variable, further consideration of classes may be beneficial, such as concentration of higher SES effects on aggression in adolescents. The focus on SES as a single variable as described in the literature review seemed to be more appropriate than including a second variable. A more closely aligned framework addressing the impact of SES on parental and adolescent behavior may be worthwhile in future research.

Parental Acceptance-Rejection Theory

The theoretical foundation for this study was the PARTheory developed by Rohner in 1980. The PARTheory addresses fundamental questions regarding causes and consequences of rejection from attachment figures, and how they affect human development throughout the lifespan. The PARTheory is divided into three subtheories:

personality subtheory, coping subtheory, and sociocultural subtheory (Rohner et al., 2012). According to this theory, humans require acceptance and warmth from attachment figures (parents, caretakers, partners).

Collectively, the subtheories depicted in PARTheory are the foundation of perceived acceptance or rejection (warmth dimension). Parental personality and sociocultural factors have an impact on the ways in which individuals identify with and execute parental behaviors. This in turn indicates to the child how to behave, demand more attention, model similar behavior, develop effective coping abilities, and expect further acceptance or rejection from future attachment figures (Rohner et al., 2012).

This theory is cross-culturally accepted, examining parental love and acceptance, and is considered to be the basis for appropriate social and emotional development universally, regardless of sex, age, and ethnicity. This theory suggests that children who perceive to be neglected or rejected will have impaired self-esteem and efficacy, emotional instability and or unresponsiveness, depressed effect, hostility, aggression, and an overall negative worldview (Rohner, Khaleque, and Cournoyer 2005). These externalizing behaviors are a response to lack of positive regard, and an attempt to avoid potential, future psychological and emotional harm (Khaleque and Rohner, 2001).

The Parental Acceptance Rejection Theory emphasizes the role in parental acceptance versus rejection or neglect on the shaping of child and adolescent behavior and outcome, highlighting the importance of prioritizing relational and emotional dimensions of parenting over SES when addressing behavioral concerns. While external factors such as SES may contribute to life stressors, PARTheory's focus on the direct

impact of perceived rejection through neglect provides a robust framework for interpreting these results. Neglect, as a form of rejection, may disrupt an adolescent's emotional safety and psychological development, which are likely to increase hostility, decrease self and emotional regulation, and or maladaptive coping mechanisms, that then create aggression.

This study expands the application of the PARTheory by demonstrating that neglect, a specific dimension of parental rejection, has a substantial impact on adolescent aggression. The results of this study suggest that fostering parental acceptance and reducing neglect may be more critical than addressing broader SES disparities in mitigating adolescent aggression.

Limitations of the Study

While this study focused on parental neglect and SES as predictors of adolescent aggression, other factors known to influence aggression in adolescents were unable to be considered in the analysis. The exclusion and limits to variables may also limit the generalizability and comprehensiveness of the findings. The generalizability of study findings can be limited if the sample lacks diversity. Ensuring a representative sample is crucial for the applicability of results to broader populations. These limitations may be beneficial in understanding factors associated with negative behaviors such as aggression, and should be considered in further examination, longitudinally. Some of these factors, as described in chapter 1 include: substance use/abuse, gender, race and cultural background, effects of pandemic on mental and behavioral health, and research design type.

Substance Use/Abuse

Substance abuse, both in parents and adolescents have been shown to be a mediator in the parent/child relationship (attitudes toward parenting strategies). Parental substance abuse may create an environment characterized by instability, neglect, and exposure to aggressive behaviors, which may increase the likelihood of the adolescent developing aggressive tendencies. Studies have shown that children who reside with parents who have alcohol problems are at higher risk for substance use and related behavioral issues (Anzalone, 2020).

Substance use disorders among youth are strongly associated with aggression and delinquency. The psychoactive effects of substance use can impair judgement and increase impulsivity, leading to aggressive behaviors. Additionally, involvement in substance use may expose adolescents to environments where aggression is more prevalent (Doran et al., 2012).

Gender

Gender plays a crucial role in patterns of aggressive behaviors among adolescents. Studies have found that violence prevention interventions designed for early adolescent youth have different outcomes based on gender, indicating that males and females may exhibit and respond to aggression differently (Finigan-Carr, et al., 2016). Indeed, aggression has been found to differ among gender in several studies. Logan-Greene and Jones (2015), suggests that males differ from females in internalizing and externalizing aggression, as well as duration and type of neglect., suggesting the longer the adolescent is exposed to neglect and the type of neglect (lack of emotional support vs. lack of

supervision), the greater the effect on the adolescent, and has shown to be more prevalent in males than in females.

Further, research suggests that adolescent females may engage in more relational aggression, which involves harming others through manipulation of social relationships, whereas males may exhibit more physical forms of aggression. These differences call attention to the need for gender specific approaches in addressing and extenuating aggressive behaviors in adolescents (Daniels, 2018).

Race and Cultural Background

Studies have suggested differences in attitudes and perception of parental behavior and SES among different cultures. For example, E. Lee et al., (2015) suggests that cultures differ in support systems within lower class neighborhoods. Describing differences in neighborhood resources, and support from extended family, that have been observed more in Asian and Hispanic cultures than Caucasian and African American cultures.

A longitudinal study conducted in 2013 of high-risk urban youth indicated that self-reported violence initiation is higher among African American adolescents compared to their White counterparts, suggesting that racial and cultural contexts play a significant role in the development of aggressive behaviors (Reingle et al., 2013). Cultural norms and values influence the expression and perception of aggression. For example, relational aggression among adolescents can vary across different cultural settings, with societal norms dictating acceptable behaviors (Voulgardou & Kokkinos, 2023).

Effects of Pandemic on Mental and Behavioral Health

This study was conducted during and shortly after the global COVID-19 pandemic, which significantly impacted adolescent mental health though disruptions in daily life, isolation, and increased stress within families. Additionally, COVID-19 has been associated with worsened mental health and accelerated brain development in adolescents, potentially leading to increased behavioral issues. These unique stressors may have exacerbated aggression in ways not directly accounted for in this model. The pandemic's effects represent a contextual factor that may not apply in future studies or diverse settings (Gotlib et al., 2022).

Similarly, Chaffee et al., (2021) interviewed teens over a six-month period on the stress, anxiety, and other mental health concerns associated with the pandemic. Fifty percent of the one hundred US teens reported additional stress in the wake of the pandemic. Elevated levels of anxiety and depression among adolescents during the pandemic have been observed, with peaks in mood disturbance corresponding to high infection rates (Chavira, Ponting, & Ramos, 2022).

Research Design

Binary logistic regression is suitable for dichotomous outcomes, but does not capture the nuances of continuous variables or changes over time; such as varying levels of aggression or evolving SES. Alternative statistical methods may be more appropriate for analyzing such data. Cross-sectional studies may provide a snapshot at one point in time, limiting the ability to infer causality or observe changes over time. Longitudinal studies may be better suited for examining temporal relationships and developments

(Robinson, 2018). Additionally, self-reported data are subject to biases such as social desirability, recall inaccuracies, and misreporting, which can affect the reliability and validity of the findings. Employing multiple data collection methods can help mitigate these biases.

Recommendations

Building upon the limitation of unexamined variables, future studies should investigate how factors such as substance use or abuse (by both parents and or adolescents), gender, race, and cultural background interact with parental neglect and SES to predict adolescent aggression. Employing a more comprehensive set of predictors will provide a wider understanding of ecological and individual factors influencing adolescent aggression. By building upon these recommendations, future research can address the complexities of SES, parental neglect, and adolescent aggression, providing deeper understandings and more effective interventions tailored to diverse populations.

Given the unique impact of the COVID-19 pandemic on family dynamics and adolescent mental health, future research could explore its long-term effects on aggression and its interaction with parenting practices. Studies could also investigate how resilience or coping mechanisms developed during the pandemic influence behavioral outcomes.

Given the research showing that neglect often manifests as a pattern of behaviors with lasting consequences, longitudinal studies should investigate how chronic neglect influences aggression over time. Future research could also explore the impact of mild versus severe neglect and the role of resilience in moderating its effects on aggressive

behaviors. Future research could investigate the moderating or mediating effects of variables such as race, culture, or gender on the relationship between parental neglect and adolescent aggression. For example, does gender moderate the impact of neglect on aggression, or does cultural background mediate the association?

Future studies may also examine specific types of neglect (e.g., educational, emotional, or medical) and their unique contributions to aggression, as highlighted by the National Research Council (1993) and Karam (2019). This could provide more granular insights into how different neglect forms affect adolescent behavior.

Given evidence that parents who experienced neglect are more likely to neglect their children, future research could explore the intergenerational transmission of neglect and its relationship to aggression. Studies could examine whether breaking cycles of neglect through interventions reduces aggression in subsequent generations (Jung & Schroder-Abe, 2019). Emotional regulation, as noted by Di Giunta et al. (2018), plays a critical role in how adolescents respond to their environments. Future research should explore whether emotional regulation mediates the relationship between parental neglect and adolescent aggression. This could inform interventions focused on teaching emotional regulation skills to offset aggression.

Building on the strong association between parental neglect and aggression identified in this study, future research could assess the effectiveness of interventions targeting parental neglect. Studies could compare outcomes for programs focused on fostering parental acceptance, consistent with the PARTheory, to understand how mitigating rejection behaviors reduces aggression.

As neglect has been reported more frequently in females, future studies could investigate whether there are gender differences in how neglect contributes to aggression. This research could also examine whether males and females develop different types of aggression (e.g., relational vs. physical aggression) in response to neglect or low SES. Given the known differences in how aggression manifests in males versus females, future research could investigate gender-specific interventions and prevention strategies. For example, exploring how relational aggression differs from physical aggression in response to neglect or other environmental factors.

While SES was not significant in the findings, future studies should elaborate on the multidimensional nature of SES, considering factors such as neighborhood characteristics, income, parental education and occupation, and access to resources. Researchers could also explore whether indirect pathways, such as SES influencing parental behaviors or stress levels, ultimately affect aggression. Expanding on findings about neighborhood influences, future studies should examine the role of community cohesion and access to resources as protective factors against aggression. Researchers could explore whether community programs or interventions designed to foster a sense of belonging and safety (as noted by Riina, Martin, & Brooks-Gunn, 2014), mitigate the negative outcomes associated with parental neglect or low SES.

Building on Yoon, Tebben, & Lee (2013), future studies should investigate the interaction between community violence exposure and parental neglect. For example, does exposure to neighborhood violence exacerbate the effects of neglect, or do supportive neighborhood relationships buffer these effects? Research could focus on

identifying protective factors in low SES households, such as positive parenting practices or access to community resources, that prevent aggression despite adverse circumstances. Investigating these mechanisms could provide actionable insights for intervention programs aimed at reducing aggression in disadvantaged populations.

To better understand how race and ethnicity interact with SES and neglect, future research could examine differences in aggression outcomes across diverse racial and ethnic groups. This should include exploring cultural factors that may influence how neglect is experienced or reported, and its impact on aggression.

To address the limitation of generalizability, future research should use larger and more diverse samples, that include varied socioeconomic, racial, and cultural backgrounds. This would enhance the applicability of findings across different adolescent populations and contexts. Future research could explore whether there are cumulative effects of SES and neglect on adolescent aggression, particularly in environments where both factors are present. Studies could use advanced statistical techniques such as latent class analysis to identify subgroups of adolescents at the highest risk based on combinations of SES, neglect, and environmental factors.

Future studies may address the limitation of the binary classification of aggression by exploring continuous levels or subtypes of aggression (e.g., relational vs. physical aggression). Advanced statistical methods such as multinomial logistic regression or structural equation modeling could be employed to examine these complex patterns. Future studies could complement quantitative analyses with qualitative methods, such as interviews or focus groups with adolescents and parents. These methods could provide a

deeper understanding of the lived experiences of neglect and cultural and contextual factors shaping aggression. This study used a cross-sectional design, future research could use longitudinal methods to explore how aggression develops and evolves over time. This approach would allow researchers to examine how changes in parental behavior, adolescent behavior, and socioeconomic conditions affect aggression trajectories, aligning with the limitations of binary logistic regression identified in this study.

Implications

The findings of this study highlight the significant relationship between parental and adolescent aggression, as well as the role of SES. These discoveries can inform targeted interventions and policies that aim to reduce aggressive behavior in adolescents, fostering healthier developmental outcomes. The study's implications for positive social change include enhanced awareness of parental neglect, policy and resource allocation, and reduction of adolescent aggression in schools and communities.

Implications of the Study and Positive Social Change

Educating parents, caregivers, educators, social workers, and clinicians about the profound effects of neglect on adolescents' behavioral outcomes could help reduce the prevalence of neglect, and inevitably physical, psychological, and physiological health. Community and school-based programs focusing on parenting education can be developed to encourage nurturing behaviors, promoting the tenets of PARTheory to mitigate rejection related aggression (Rohner, 2021). Policymakers can use these findings to allocate resources to at-risk communities, focusing on family support services in areas

with low SES. Programs aimed at improving the economic stability of families, such as access to affordable childcare or job training programs, could indirectly reduce adolescent aggression by considering root causes lined to SES. Schools can incorporate confliction resolution programs into their curricula, equipping adolescents with healthier coping mechanisms. Community coalitions can foster safe environments where adolescents are encouraged to thrive, reducing the risk of aggressive behaviors influenced by neglect or economic hardships.

Methodological Implications

Considering this study's rich methodological factors, such as sample size, external factors, self-report limitations, race, cultural background, gender, substance use/abuse, effects of pandemic, and others factors, future research should expand on these variables. This study's binary logistic regression model demonstrates the utility of analyzing categorical and continuous predictors of adolescent aggression. However, future studies could incorporate additional variables, such as parental substance use, cultural factors, or community violence, to expand the explanatory power of similar models. Longitudinal designs could address the limitation of predicting continuous or dynamic changes in behavior, such as fluctuations in aggression as children grow older or family circumstances change.

Future studies could replicate this research across diverse geographic, cultural, and socioeconomic contexts to examine the generalizability of findings. This would also address gaps in understanding the interaction between race, culture, and adolescent aggression. Incorporating qualitative data, such as interviews with adolescents and

parents, could provide a richer understanding of the lived experiences underlying the quantitative patterns observed.

Theoretical Implications

The findings reinforce PARTheory, demonstrating the crucial role of parental behaviors in shaping adolescents' emotional and behavioral development. Future theoretical advancements could explore the intersection of PARTheory with contextual factors, such as SES, to develop a more comprehensive framework for understanding adolescent aggression. Broadening concepts of emotional influence into PARTheory could help address gaps related to external mitigating factors, such as neighborhood cohesion or social support.

Empirical Implications

This study contributes to the body of research on neglect by focusing specifically on its role in adolescent aggression. Its findings provide a basis for further exploration into different forms of neglect, such as education or medical neglect, and their distinct effects on aggression. By examining SES as a predictor, this study highlights the complex ways economic and social factors influence aggression. Future research can build on these findings by studying interactions between SES and other environmental variables.

Recommendations for Practice

Interventions such as parent training programs that emphasize warmth, acceptance, and positive discipline techniques can offset the effects of neglect on adolescent aggression. Educators and school counselors should be trained to identify signs of neglect and provide referrals to appropriate support services. Schools could

adopt social-emotional learning (SEL) programs to teach adolescents how to manage aggression through improved emotional regulation and conflict resolution skills (Di Giunta et al., 2018). Community organizations should prioritize resources for low SES families, including financial assistance, after school programs, and mental health services.

Policymakers could use these findings to advocate for funding family support programs in communities disproportionately affected by poverty and neglect. Mental health care professionals working with adolescents should use trauma informed approaches to address underlying neglect and its impact on aggression. Training for teachers and school administrators in trauma informed practices can help them better understand and support students exhibiting aggressive behaviors due to neglect.

Conclusion

This study underscores the profound impact of parental neglect and SES on adolescent aggression. By applying PARTheory as a guiding framework, the research highlights how the absence of parental warmth and acceptance, combined with environmental and economic stressors, can significantly contribute to aggressive behavior in adolescents. Among the findings, parental neglect emerged as a powerful predictor, reinforcing the critical role of nurturing and stable caregiving in fostering positive developmental outcomes.

The study also sheds light on the broader contextual influences of SES, emphasizing that economic and social disparities not only shape family dynamics but also create conditions that can exacerbate behavioral challenges in youth. Although SES did

not reach statistical significance as an independent predictor in this study, its theoretical and practical relevance remains vital, as it influences access to resources and opportunities that mitigate or amplify the effects of neglect.

The implications of this research extend beyond academia, offering actionable insights for parents, educators, mental health care professionals, and policymakers. Strengthening family support systems, providing community resources, and implementing educational programs on parenting and emotional regulation are essential steps toward reducing adolescent aggression.

The take-home message of this study is clear: Adolescents thrive in environments where they feel accepted, supported, and safe. Addressing the dual challenges of neglect and socioeconomic inequality can pave the way for healthier and more resilient youth, ultimately fostering positive social change. While this study provides meaningful contributions, it also highlights the need for continued research into the dynamic interplay between individual, familial, and social factors.

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Appendix A: Permission for Use of the Parental Acceptance-Rejection Questionnaire

Date: Thu, Jul 29, 2021 at 5:12 PM
Subject: Re: thank you for your order
To: Rohner, Ronald P. <r.rohner@uconn.edu>

Thank you so much

On Thu, Jul 29, 2021, 11:55 AM Rohner, Ronald P. <r.rohner@uconn.edu> wr

Thank you for your order. In addition to the books you have ordered I am attaching *Recovery From Rejection,* a gratis publication provided to clir containing handouts for clients. We hope you and your colleagues will find it useful in your practice. This manual is now available in eight langua distributed worldwide as a public service to any clinician who would like to inform clients about different aspects of interpersonal acceptance-reje

Attached you will find all the measures you requested (in the PARQ Test Manual). Also attached are some files you will find useful when analyzin After collecting data from respondents, to score the measures, go to http://parscore6.appspot.com and using a Gmail account (we are hosted on cloud), register your project. Answer all questions in affirmative. You will then be ready to score. USE THE HELP VIDEO FOR EASY USE OF TH PROGRAM. Use the following protocol to enter item scores:

Numerical Scoring. Record the numerical score for each response as follows:

Almost Always True	Sometimes True	Rarely True	Almost Never True
4	3	2	1

The scoring program does all reverse-scoring for you, as well as computes for missing data. This email grants permission to use the measures i online. International copyright law forbids release of these measures to any third party.

Warm regards,

Nancy

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Appendix B: Parental Acceptance-Rejection Questionnaire (Rohner, 2020)

PARENT PARQ (Short Form)

_____ _____

Name (or I.D. number) Date

_____

Relationship to Child (Mother, Father)

The following pages contain a number of statements describing the way parents sometimes act toward their children. Read each statement carefully and think how well it describes the way you treat your child. Work quickly. Give your first impression and move on to the next item.

Four boxes are drawn after each sentence. If the statement is *basically* true about the way you treat your child then ask yourself, "Is it almost *always* true?" or "Is it only *sometimes* true?" If you think you almost always treat your child that way, put an *X* in the box ALMOST ALWAYS TRUE; if the statement is sometimes true about the way you treat your child then mark SOMETIMES TRUE. If you feel the statement is basically *untrue* about the way you treat your child then ask yourself, "Is it *rarely* true?" or "Is it almost *never* true?" If it is rarely true about the way you treat your child put an *X* in the box RARELY TRUE; if you feel the statement is almost never true then mark ALMOST NEVER TRUE.

Remember, there is no right or wrong answer to any statement, so be as honest as you can. Respond to each statement the way you feel you really treat your child rather than how you would like to treat her/him. For example, if you almost always hug and kiss your child when (s)he is good, you should mark the item as follows:

		TRUE OF ME		**NOT TRUE OF ME**	
		Almost Always True	***Sometimes True***	***Rarely True***	***Almost Never True***
	I hug and kiss my child when s(he) is good	☒	☐	☐	☐

		TRUE OF ME		NOT TRUE OF ME	
		Almost Always True	*Sometimes True*	*Rarely True*	*Almost Never True*
1.	I say nice things about my child	☐	☐	☐	☐
2.	I pay no attention to my child	☐	☐	☐	☐
3.	I make it easy for my child to confide in me	☐	☐	☐	☐
4.	I hit my child even when (s)he may not deserve it	☐	☐	☐	☐
5.	I see my child as a big nuisance	☐	☐	☐	☐
6.	I punish my child severely when I am angry	☐	☐	☐	☐
7.	I am too busy to answer my child's questions	☐	☐	☐	☐
8.	I resent my child	☐	☐	☐	☐
9.	I am really interested in what my child does	☐	☐	☐	☐
10.	I say many unkind things to my child	☐	☐	☐	☐
11.	I pay no attention to my child when (s)he asks for help	☐	☐	☐	☐
12.	I make my child feel wanted and needed	☐	☐	☐	☐
13.	I pay a lot of attention to my child	☐	☐	☐	☐
14.	I hurt my child's feelings	☐	☐	☐	☐
15.	I forget important things my child thinks I should remember	☐	☐	☐	☐
16.	I make my child feel unloved if (s)he misbehaves	☐	☐	☐	☐
17.	I make my child feel what (s)he does is important	☐	☐	☐	☐
18.	When my child does something wrong, I frighten or threaten him/her	☐	☐	☐	☐
19.	I care about what my child thinks, and encourage him/her to talk about it	☐	☐	☐	☐
20	I feel other children are better than my child	☐	☐	☐	☐
21.	I let my child know (s)he is not wanted	☐	☐	☐	☐
22.	I let my child know I love him/her	☐	☐	☐	☐
23.	I pay no attention to my child as long as (s)he does nothing to bother me	☐	☐	☐	☐
24.	I treat my child gently and with kindness	☐	☐	☐	☐

Appendix C: Children's Anger Management Scale; subscale (Zeman, Shipman, & Suveg, 2010)

DO NOT MAIL - PRESENT THIS FORM TO THERAPIST AT FIRST SESSION

ID #_____

Date: ___/____/___

Children's Emotion Management Scale: **ANGER** - Parent Report

Instructions: Please circle the response that best describes your child/adolescent's behavior when he/she is feeling **mad**.

1.	When my child is feeling mad, he/she can control his/her temper.	Hardly Ever **1**	Sometimes **2**	Often **3**
2.	My child holds his/her anger in.	Hardly Ever **1**	Sometimes **2**	Often **3**
3.	My child stays calm and keeps his/her cool when he/she is feeling mad.	Hardly Ever **1**	Sometimes **2**	Often **3**
4.	My child does things like slam doors when he/she is mad.	Hardly Ever **1**	Sometimes **2**	Often **3**
5.	My child hides his/her anger.	Hardly Ever **1**	Sometimes **2**	Often **3**
6.	My child attacks whatever it is that makes him/her very angry.	Hardly Ever **1**	Sometimes **2**	Often **3**
7.	My child gets mad inside but doesn't show it.	Hardly Ever **1**	Sometimes **2**	Often **3**
8.	My child can stop him/herself from losing his/her temper when he/she is mad.	Hardly Ever **1**	Sometimes **2**	Often **3**
9.	My child says mean things to others when he/she is mad.	Hardly Ever **1**	Sometimes **2**	Often **3**
10.	My child tries to calmly deal with what is making him/her mad.	Hardly Ever **1**	Sometimes **2**	Often **3**
11.	My child is afraid to show his/her anger.	Hardly Ever **1**	Sometimes **2**	Often **3**

Appendix D: MacArthur Scale of Subjective Social Status (Adler, Epel, Castellazzo, & Ickovics, 2000)

Instructions: Think of this ladder as representing where people stand in the United States. At the **top** of the ladder are the people who are the best off – those who have the most money, the most education, and the most respected jobs. At the **bottom** are the people who are the worst off – those who have the least money, least education, the least respected jobs, or no job. The higher up you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom.

Where would you place yourself on this ladder?
Please place a large **"X"** on the rung where you think you stand at this time in your life relative to other people in the United States.

Appendix E: Inclusion/Exclusion Criteria Questions

Inclusion criteria: To ensure the appropriateness of inclusion criteria, a short questionnaire using SurveyMonkey will be used to determine if the individual qualifies to participate in the study, and will consider the following:

1. Are you the parent or guardian of a child between the ages of 12-18?
2. Has your child ever been formally diagnosed with a developmental or behavioral disorder by a licensed healthcare provider?

To qualify, an answer of yes for question 1, and an answer of no for question 2 must be given.

Appendix F: Final Survey Version (How the Survey Was Presented to Participants via SurveyMonkey)

Relationship to child:	Child's age:			
1. I say nice things about my child	Almost Always True	Sometimes True	Rarely True	Almost Never True
2. I pay no attention to my child	Almost Always True	Sometimes True	Rarely True	Almost Never True
3. I make it easy for my child to confide in me	Almost Always True	Sometimes True	Rarely True	Almost Never True
4. I hit my child even when they may not deserve it	Almost Always True	Sometimes True	Rarely True	Almost Never True
5. I see my child as a big nuisance	Almost Always True	Sometimes True	Rarely True	Almost Never True
6. I punish my child severely when I am angry	Almost Always True	Sometimes True	Rarely True	Almost Never True
7. I am too busy to answer my child's questions	Almost Always True	Sometimes True	Rarely True	Almost Never True
8. I resent my child	Almost Always True	Sometimes True	Rarely True	Almost Never True
9. I am really interested in what my child does	Almost Always True	Sometimes True	Rarely True	Almost Never True
10. I say many unkind things to my child	Almost Always True	Sometimes True	Rarely True	Almost Never True
11. I pay no attention to my child when they ask for help	Almost Always True	Sometimes True	Rarely True	Almost Never True
12. I make my child feel wanted and needed	Almost Always True	Sometimes True	Rarely True	Almost Never True
13. I pay a lot of attention to my child	Almost Always True	Sometimes True	Rarely True	Almost Never True
14. I hurt my child's feelings	Almost Always True	Sometimes True	Rarely True	Almost Never True
15. I forget important things my child thinks I should remember	Almost Always True	Sometimes True	Rarely True	Almost Never True
16. I make my child feel unloved if they misbehave	Almost Always True	Sometimes True	Rarely True	Almost Never True

17. I make my child feel what they do is important	Almost Always True	Sometimes True	Rarely True	Almost Never True
18. When my child does something wrong, I frighten or threaten them	Almost Always True	Sometimes True	Rarely True	Almost Never True
19. I care about what my child thinks, and encourage them to talk about it	Almost Always True	Sometimes True	Rarely True	Almost Never True
20. I feel other children are better than my child	Almost Always True	Sometimes True	Rarely True	Almost Never True
21. I let my child know they're not wanted	Almost Always True	Sometimes True	Rarely True	Almost Never True
22. I let my child know I love them	Almost Always True	Sometimes True	Rarely True	Almost Never True
23. I pay no attention to my child as long as they do nothing to bother me	Almost Always True	Sometimes True	Rarely True	Almost Never True
24. I treat my child gently and with kindness	Almost Always True	Sometimes True	Rarely True	Almost Never True
25. When my child is feeling mad, they can control their temper	Hardly Ever 1	Sometimes 2	Often 1	
26. My child holds their anger in	Hardly Ever 1	Sometimes 2	Often 1	
27. My child stays calm and keeps their cool when they're feeling mad	Hardly Ever 1	Sometimes 2	Often 1	
28. My child does things like slam doors when they're mad	Hardly Ever 1	Sometimes 2	Often 1	
29. My child hides they're anger	Hardly Ever 1	Sometimes 2	Often 1	
30. My child attacks whatever it is that makes them very angry	Hardly Ever 1	Sometimes 2	Often 1	

31. My child gets mad inside but doesn't show it	Hardly Ever 1	Sometimes 2	Often 1	
32. My child can stop themselves from losing their temper when they're mad	Hardly Ever 1	Sometimes 2	Often 1	
33. My child says mean things to others when they're mad	Hardly Ever 1	Sometimes 2	Often 1	
34. My child tries to calmly deal with what is making them mad	Hardly Ever 1	Sometimes 2	Often 1	
35. My child is afraid to show their anger	Hardly Ever 1	Sometimes 2	Often 1	
36. Think of this ladder as representing where people stand in the U.S. At the top of the ladder are the people who are best off (most money/best education/best housing); at the bottom of the ladder are the people who are the worst off (least money/least education/lowest housing). Where would you place yourself on this ladder? Please place a large **X** on the rung where you think you stand at this time in your life.		Examples -Highest level of formal education, high income, best living conditions. -Average education, average income, average living conditions. -Low education, low income, worst living conditions.		