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Abstract

Parent aggression exists on a continuum with corporal punishment at one end and abuse at the other. There is still controversy as to whether any kind of parent aggression toward an adolescent contributes to externalizing and internalizing behaviors. Relative to what is known about parent aggression during childhood, much less is known about parent aggression toward adolescents from a systemic and developmental perspective. This study explored the stability and mutual influence of parent aggression and adolescent externalizing and internalizing behaviors. The study found that the constructs were stable over time, and that with this sample population, parental physical and emotional aggression co-occurred with internalizing and externalizing behaviors at both points in time. Neither form of parent aggression showed a longitudinal association with youth externalizing or internalizing behaviors. The current study found a mutual influence between parent aggression and youth maladaptive behaviors, thus adding to the growing but limited literature considering both directions of influence. Finally, the study found a temporal association between the quality of relationships with family at T1 and youth internalizing behaviors at T1 and T2, suggesting that family relationships remain important predictors of adolescent emotional wellbeing.

PARENT AGGRESSION AND YOUTH EXTERNALIZING AND INTERNALIZING BEHAVIORS:
STABILITY AND MUTUAL INFLUENCE

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DISSERTATION

Submitted in partial fulfillment of the requirements of Doctor of Philosophy in Child and
Family Studies in the Department of Child and Family Studies

May 2013

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Dedication

This dissertation is dedicated to my brother John who left us all too early, to my daughter Genna who is my inspiration, to my mother Violet, my sisters Mary, Claire, Liz and Christine who have been continuous supports throughout this journey, to Ruby for her creative spirit, to Gloria for her sense of humor, and to my life partner, Diane for your boundless love, patience, and unconditional support.

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I am grateful to the Department of Child and Family Studies. The support staff made me feel welcomed from day one and continued to guide me through the details and trials of being a graduate student. I would not have completed my dissertation without their knowledge of the processes that make the department effective. Thank You.

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Chapter 1: Introduction

Parent Aggression and Youth Externalizing and Internalizing Behaviors: Stability and Mutual Influence

Central debates in the literature on discipline include implications for youth maladaptive behavior. Whether parent-adolescent aggression encompasses extreme corporal punishment and thereby meets the official definition of abuse; or whether it is less severe and meets more socially acceptable norms for children (slapping, spanking); there is a continuum of violence from parents to adolescents that impacts youth externalizing and internalizing behaviors. Externalizing behaviors include aggressive and delinquent behaviors and internalizing behaviors include emotional problems including depression, anxiety, somatic complaints and withdrawn behaviors, as identified by Achenbach (1991). Much research to date has been focused on severe forms of parent aggression (termed corporal punishment in the literature) and abuse, and has found strong evidence for negative youth outcomes (English, Widom, & Branford, 2002; Maxfield & Widom, 1996; Smith & Thornberry, 1995; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001; Shields & Cicchetti, 1989; Widom, Schuck, & Raskin White, 2006; Zingraf, Leiter, Myers, & Johnson, 1993). Research on mild to moderate parent aggression has been contradictory, with a few researchers citing no harm to the child (Baumrind, 1996; Baumrind, Larzelere, & Cowen, 2002), while others conclude that parent aggression is harmful to the child (Gershoff, 2002, 2010). Parent aggression is defined in this study as any aggression toward a child, and includes physically and emotionally aggressive discipline from their primary caregiver.

While this has been an area of focus for decades, there is still some controversy about the harm of parent aggression (Gershoff, 2010). Relative to what is known about parent aggression during childhood, much less is known about parent aggression towards adolescents from a systemic and developmental perspective. Adolescence has been described by developmental theorists as a time of extreme physical, emotional and cognitive changes that has the potential to unbalance family functioning (Agnew, 1992; Lourie, 1979; Doueck, Ishisaka, & Greenway, 1988). A central task for adolescents is to develop psychological autonomy from their parents (Erikson, 1968), and closer connections with peers (Newman & Newman, 2012). Effects of parent aggression are thought to interfere with developmental processes leading to poor self-concept and a reduced ability to engage with prosocial peers, thus affecting the adolescents' wellbeing (Egeland & Erikson, 1987; Simons, Johnson, & Conger, 1994; Smith & Thornberry, 1995).

Gender has been shown to impact the effects of parent aggression on youth maladaptive behaviors and is conceptualized as a moderator in the current study. Much research has indicated that the occurrence of parent aggression is associated with internalizing behavior in girls and externalizing behavior in boys (Galambos, Berenbaum, & McHale, 2009; McGee, Wolfe, & Wilson, 1997; Trickett & McBride-Chang, 1995), as well as developmental trajectories of problem behaviors (Leve, Kim, & Pears, 2005). Contrary to those studies, McCrae (2007), explored the internalizing and externalizing behaviors of youth in the child welfare system, and found that boys experienced greater internalizing problems, but girls reported higher rates of depressive symptoms. In a study by Spoth and colleagues (2006), no reported differences emerged in family risk factors and their

association with maladaptive youth behaviors. Although the majority of research has suggested that gender is a factor in behavioral outcomes, gender differences in pathways remain unclear.

Family development is also implicated in the parent aggression/ youth maladaptive behaviors¹ interactions. Parents with adolescents tend to be in middle adulthood (35-60 years old, Newman & Newman, 2012). Balancing work and family, and enhancing intimate relationships are tasks associated with this time period (Erikson, 1959, Newman & Newman, 2012). Utilizing aggressive parenting tactics interrupts parents' close connection with their adolescent child and potentially causes stress in the work/home balance. This investigation, using Systemic Family Development Model (Laszloffy, 2002) examines the complex relationships that exist between parent aggression, youth externalizing and internalizing behaviors and the roles that the quality of relationships with friends and family (including extended family) play as possible pathways in the dynamic.

Conceptualizing Parent Aggression

As indicated earlier, much of the evidence found for negative youth outcomes as a result of parent aggression is from studies of corporal punishment (CP) as well as studies of adolescent abuse. Both fields of study are used to frame the current study. This study views parent aggression² toward an adolescent as a continuum of physically and emotionally aggressive acts that may or may not rise to the level of abuse as defined in the United States. This way of framing parent aggression is supported by other researchers who

¹ Maladaptive youth behaviors and externalizing and internalizing behaviors are used interchangeably throughout the paper.

² In this study, parent aggression is comprised of both physical and emotional aggression, it is discussed at times as parent aggression in general but is understood to include both types.

recommend that any form of parent to child aggression be conceptualized on a discipline-child abuse continuum (Graziano, 1994; Rodriguez & Richardson, 2007; Rodriguez, 2010). Therefore, in this study, any acts of physical or emotional aggression by the parent to the adolescent are defined as parent aggression. Since the instrument used in this study only assesses parent behavior and does not assess adolescent's abuse status, the entire continuum of physical and emotional discipline as reported by the primary caregiver, ranging from mild physical punishment to possible abuse is used.

Emotional aggression is included in the definition of parent aggression and has been found to have a strong relationship with long-term psychological functioning (Horner, 2011; Kaplan et al., 1999; Trickett, Mennen, Kim, & Sang, 2009), which is included in the current study's definition of internalizing behaviors. Emotional aggression, otherwise known as psychological aggression³ is a less studied form of parent aggression. It has been found to co-occur with other forms of CP and abuse (Claussen & Crittendon, 1991; Mennen, Kim, Sang, & Trickett, 2010; Trickett, Mennen, Kim, & Sang, 2009) and is evidenced by verbal abuse, developmentally inappropriate expectations, or excessive demands on performance (Trickett, Negriff, Ji, & Peckins, 2011). Iwanic (2006) describes emotional aggression as the "core of all major forms of abuse and neglect, and is more damaging in its impact than acts of physical abuse (and sexual abuse) alone" (p.4). The combination of physical and emotional aggression (insulting, swearing, and threatening) may create higher stress in the developing youth and influence internalizing and externalizing behaviors (Vissing, Straus, Gelles, & Harrop, 1991). Discussion of each type of aggression is provided in the literature

³ Emotional aggression and psychological aggression are used interchangeably throughout this document.

review and both are found to be predictive of externalizing and internalizing behaviors in adolescents.

It is not uncommon that different forms of parent aggression coexist (Briere & Runtz, 1988), and are highly correlated (Higgins & McCabe, 2000). Mennen, Kim, Sang, & Trickett, (2010) found that physical abuse and emotional abuse co-occurred in 61% of their sample. Although the differences in these forms of aggression are difficult to draw out because they often co-occur, and the possible negative effects on youth are not easily isolated, it is important that the distinctions be made because they may have differing effects on youth outcomes and additionally may be impacted by gender (Claussen & Crittenden, 1991; Crittenden, Claussen, & Sugarman, 1994; Perrin-Miller, Perrin, Kocur, 2009).

A growing body of literature highlights the importance of separating out emotional forms of aggression because they have been found to be associated with youth impairment (Claussen & Crittenden, 1991; Glaser, 2002; Mennen, Kim, Sang, & Trickett, 2010; Miller-Perrin, Perrin, Kocur, 2009). Recent studies have focused on defining more characteristics of parent aggression to identify the impact of differing types of parent aggression (Mennen Kim Sang & Trickett, 2010 Trickett, McBride & Chang, 1995; Miller-Perrin, Perrin, Kocur, 2009). This study uses analysis that will examine the contributions of each type of parent aggression while at the same time controlling for the other, to understand the individual impact each has on youth behaviors.

The overall purpose of this research is to assess whether 1. there is co-occurrence in the parent aggression/youth maladaptive behavior problems at each point in time; 2. there is

stability in both forms of parent aggression, youth externalizing and youth internalizing behaviors during early and middle adolescence; 3. whether there is evidence for the bi-directional or mutually influenced effects involving parent aggression and adolescents' externalizing and internalizing behaviors; 4. whether the quality of relationships with friends and/or family mediate the relationship between parent aggression and youth externalizing and/or internalizing behaviors; and 5. whether gender influences the parent aggression / youth negative behaviors dynamic.

To accomplish the research goals, a sample population of 12 year olds from a component of the Project on Human Development in Chicago Neighborhoods called the Longitudinal Cohort Study (Earls, 1994-2001), was assessed on several key variables over two waves of the study. The study includes an ethnically diverse data set, which allows insight into marginalized populations. Although other studies have included racially and ethnically diverse sample populations, most have included primarily Caucasian youth. This study includes primarily Hispanic and African American urban youth, and provides insight into the continuity and stability of individual and parent/ adolescent behaviors. While this data set studies how families, schools and neighborhoods affect adolescent development, the primary focus of this research is the impact of family and friends on adolescent development within the context of aggressive parenting. This data set allows the ability to identify and address patterns of family processes in order to enrich policy planning, prevention and treatment strategies.

This research specifically considers developmental implications for adolescents rather than young children and attends to past methodological weaknesses by using a

prospective and longitudinal data. Path analysis is used to investigate the unique effects of two forms of parent aggression on early and middle adolescents' externalizing and internalizing behaviors and further explores the quality of relationships with family and friends as processes through which the parent aggression-youth negative behaviors operates. It will also allow exploration of temporal connections between parent aggression and youth externalizing and internalizing behaviors because data was collected at two points in time with approximately 2 years between assessments.

Decades of research on child abuse and more recently on adolescent abuse have found associations with maladaptive youth behaviors (English, Widom, & Branford, 2002; Maxfield & Widom, 1996; Smith & Thornberry, 1995; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001; Shields & Cicchetti, 1989; Widom, Schuck, & Raskin White, 2006; Zingraff, Leiter, Myers, & Johnson, 1993). The more recent work has utilized research designs and analysis methods that have allowed for temporal associations, and specifically that parental abuse predicts adolescent externalizing and internalizing behaviors (Cullerton-Sen, Cassidy, Murray-Close, Han, Cicchetti, Crick, & Rogosch, 2008; Lourie, 1979; Pelcovitz, Kaplan, Ellenberg, Labruna, Salzinger, Mandel, & Weiner, 2000). The current study first examines the co-occurrence of the parent-adolescent dynamic at two points in time to assess possible developmental differences in outcomes, leading to the first study hypothesis that parental emotional and physical aggression and youth externalizing and internalizing behaviors will co-occur at time 1 (T₁) and at time 2 (T₂).

The second study hypothesis is that parental physical and emotional aggression, externalizing, and externalizing behaviors are stable throughout early and middle

adolescence. To support the notion of stability in parent aggression, Rodriguez (2010) utilized data from three different studies to determine the child abuse potential in families where there was parent-child aggression. Data gathered assessed youth up to 12 years old, and demonstrated that parent aggression was associated with over reactive and authoritarian parenting styles. Conceptually, authoritarian parenting styles are also associated with abuse potential. This type of parenting style includes attitudes about children and discipline that supports the use of parental physical aggression. Findings by Rodriguez (2010) regarding the over reactive nature of aggressive parenting behaviors suggests an emotionally aggressive component as well. Authoritarian parenting styles tend to be stable (Haskett, Scott, & Fann, 1995).

To support the notion of stability of youth externalizing and internalizing behaviors, Reitz, Dekovic, and Meijer (2005) found in a sample of youth between the ages of 12 and 15 that both externalizing and internalizing behaviors were stable over a 1 year period. Additional studies have suggested that internalizing and externalizing behaviors are stable from childhood through adolescence. Bornstein, Hahn, and Hayes (2010) suggested that youth with lower social competence during young childhood experienced both externalizing and internalizing behaviors at age 14. Similarly, Jones and Forehand (2003) in their study of low-income, inner-city African American youth suggested that externalizing and internalizing behaviors in young childhood partially accounted for later negative outcomes social competence. European studies have also supported the stability externalizing and internalizing behaviors (Ferdinand, & Verhulst, 1995; Hofstra, der Ende, & Verhulst, 2000;

Sourander & Helstela, 2005). It is expected that the behaviors will be stable for this sample population.

This study explores both the timing and sequencing of parent aggression and adolescent externalizing and internalizing behaviors, as well as how externalizing and internalizing behaviors in early adolescence may predict parent aggression during middle adolescence, thus adding to the growing but limited literature considering both directions of influence. It is hypothesized that both parent physical aggression and parent emotional aggression toward their adolescent child will impact youth maladaptive behaviors in similar ways. This study will assess whether both forms of parental aggression at T1 predict youth negative behaviors at T2, which lends credibility to determining causation. An alternative interpretation of the dynamic could be that youth externalizing and internalizing behaviors at T1 predict parent aggression at T2. Both interpretations support the systemic, developmental perspective that relationships between adolescents and their parents are mutually influential. The third study hypothesis is: Parental physical and emotional aggression in early adolescence predicts youth externalizing and internalizing behaviors in middle adolescence, and youth externalizing and internalizing behaviors in early adolescence predict parent aggression in middle adolescence.

Potential Pathways from Parent Aggression to Externalizing and Internalizing Behaviors:

The Quality of Relationships with Friends and Family

Two potentially important pathways through which forms of parent aggression may lead to externalizing and internalizing behaviors in adolescents are via the quality of

relationships with friends and family. Positive peer relationships have been shown to moderate the relationship between chronic parent aggression and internalizing behaviors in children. The findings suggest that positive relationships with friends can buffer some of the negative effects of parent aggression on children's development (Bolger, Patterson, and Kupersmidt, 1998). The current study explores whether the quality of peer relationships is an actual pathway for the effect of both parental physical and emotional aggression on negative youth behaviors. This exploration emerges from studies that suggest that the quality of friendships is damaged by maltreatment. Both forms of parent aggression affect youths' self-perceptions. Through the quality of the parent-youth relationship, a young person develops a sense of worthiness (Harter, 1998; Kim & Cicchetti, 2004), which is damaged through aggressive parenting strategies. According to Harter (1998), youth experiencing parent aggression, carry with them a sense of "inner badness" that is integrated into how they attempt to make connections with others. When youth feel badly about themselves they may act in ways that reinforce their own perceptions, which can impact their increased isolation. This is supported by other developmental theorists (Bolger, et al., 1998; Bolger & Patterson, 2001), who suggest that peers see physically abused youth in a negative way. Without the connection to pro-social peers during adolescence youth are at risk for experiencing loneliness, which has been shown to be a critical factor in youths' maladaptive behaviors for both girls and boys (Appleyard, Yang, & Runyan, 2010).

Kim and Cicchetti (2010) compared physical, emotional and sexual abuse, and neglect and found that parental emotional aggression led to peer rejection. As a result, youth were more likely to experience psychological pain and withdraw (internalizing behaviors) or

engage in physical aggression (externalizing behaviors). Overall, young adolescents who have experienced parental physical and emotional aggression that has risen to the level of abuse are seen as less cooperative, more aggressive, and having lower status, resulting in social exclusion (Salzinger, Feldman, Hammer, & Rosario, 1993). Abused youth have more conflictual friendships and display less positive affect (Parker & Herrera, 1996 and according to Salzinger, Feldman, Hammer, and Rosario, 1993).

Youth experiencing parent physical aggression have been found to show distorted perceptions of social processes (Dodge, Bates, & Pettit, 1990). Dodge and colleagues explored whether youth appropriately interpreted the behavior of peers and found that they misappropriated negative intentions, and were less attentive to social cues. Other studies support the disturbed social relationships in youth experiencing parental physical and emotional aggression (Bolger, Patterson, & Kupersmidt, 1998; Trickett, & McBride-Chang, 1995). Combined these studies suggest that youth experiencing parent aggression struggle with social relationships with peers, and according to Bolger and colleagues, this increases over time. If a youth experiences repeated rejections it triggers the negative self-evaluative cognitions, which, according to Izard (2002), can trigger anger and aggression (externalizing behaviors).

During adolescence, since social acceptance is a stage salient task (Erikson, 1968), if pro-social peers reject youth who experience forms of parent aggression, they may be more vulnerable to association with antisocial peers, which has been shown to put youth at risk for delinquent behavior (Jonson-Reid, 2002; Patterson, G. R., 1982; Salzinger, Rosario, & Feldman, 2007). Dishion and colleagues identified that deviant peers reinforce each other

through conversations about deviant topics, and thus reinforce each other's deviant behavior consistent with externalizing behaviors (Dishion, Spraklen, Andrews, & Patterson, 1996). When parents use coercive and aggressive parenting tactics, children are more likely to use similar practices with peers (Bolger & Patterson, 2001), making them less desirable as potential friends. The authors suggest that maltreated children were repeatedly rejected across childhood and into adolescence. Additionally, Egeland, Yates, Appleyard, & Van Dulman (2002) suggested that earlier alienation from friends predicted early onset of externalizing behaviors.

Overall the studies cited support the detrimental effect of parent aggression on the development of healthy peer relationships. Given those findings and since developmental researchers suggest that forming positive relationships is a key task, this study explores whether both forms of parent aggression interrupt the quality of relationships with friends, which leads to externalizing and internalizing behaviors in adolescents.

The familial relationship is a primary source of support during adolescence (Rutter, 1985). It is possible that the nature of both forms of parent aggression, as opposed to neglectful parenting, is more unpredictable, leaving the youth nurtured at times and emotionally and physically battered at others. Not only does this set up a negative parent/adolescent relationship, parent aggression also leads to aversive family relationships (Loeber, & Stouthamer-Loeber, 1998; Kim, Hetherington, & Reiss, 1999), which developmental researchers have suggested are predictive of externalizing behaviors.

Family patterns of behavior are established early in the family's development. If parents use coercive and aggressive strategies with their children, a dynamic is established

in family interactions (Granic & Patterson, 2006). Patterson and colleagues (1992) showed that the developing pattern of coercive family processes was linked with later aggressive behavior in youth. Youth react to the behavior of other family members, and in the case of aggressive parenting, aversive strategies become embedded in the family's repertoire, and become cyclic. The negative consequences of exposure to parental emotional and physical aggression may interrupt supportive family relationships, creating a more stressful context, which leads to negative youth outcomes including externalizing and internalizing behaviors. On the positive side, according to Granic and Patterson (2006), the adolescent time period (between 11 and 14 years) may be an important stage transition period to break the cycle of negative family processes to reduce aggressive and delinquent youth behaviors.

Sibling relationships appear to effect adolescent wellbeing (Seginer, 1998). Although youth may be more focused on peers at this developmental stage, positive relationships with siblings contribute to adolescents' self-worth (Jodi, Bridges, Kim, Mitchell, & Chang, 1999). Other research has found congruence between the parent/child relationship and the sibling relationships (Conger, Conger, & Elder, 1994), meaning that if there is conflict in the parent-adolescent relationship, relationships with other family members are strained as well. The importance of the sibling relationship in the everyday lives of adolescents has also received cross-cultural support (Updegraff, McHale, Whiteman, Thayer, & Delgado, 2005), reinforcing its importance in the exploration of family processes.

Many scholars have reinforced the importance of the parental/child relationship and social competence as they apply to positive youth outcomes. Developmental theorists' suggest that a high-quality relationship between parents and youth as well as between

youth and family and youth and peers is central to the positive resolution of stage salient tasks during adolescence (Bolger, Patterson, & Kupersmidt, 1998; Formoso, Gonzales, & Aiken, 2000; Turner, & Finkelhor, 1996; Kim, Hetherington, & Reiss, 1999; Newman & Newman, 2012). Achievement of psychological autonomy is best attained through positive relationships with parents rather than through aggression by parents or primary caregivers (Hill & Holmbeck, 1986; Ryan & Lynch, 1989). By exploring the impact of relationships with family and friends as mediators in the relationship between parent aggression and maladaptive youth behaviors, insight can be gained into processes at work. Examining these mediational influences should assist the practitioner community by identifying therapeutic targets that address core determinants of youth maladaptive behavior. The fourth hypothesis tested in this study is that the quality of relationships with friends and/or family mediates the effect of parental physical and emotional aggression on behavioral outcomes for both boys and girls.

Current Study

Using the Longitudinal Cohort Study, 567 individuals and their caregivers were followed from approximately 1995-2000. The original Longitudinal Cohort Study followed approximately 6000 youth and caregivers from 1995-2001, with the primary goal of understanding the development of delinquency and youth violence. Youth were divided into several age groups, which the authors described as cohorts, who remained together throughout the length of the study. Data were collected at three different time periods (waves 1, 2, & 3) throughout the 6 years of the study. The current study used the 12 year-old cohort, and reanalyzed data at two time periods: the wave 1 cohort (1995-1997; T₁) and the

wave 2 cohort (1997-2000; T2). The main variables explored were the prevalence of parental physical and emotional aggression, the quality of relationships with the family (including nuclear and extended family), the quality of relationships with friends, and the occurrence of youth externalizing and internalizing behaviors. Additionally, because research had suggested that these relationships differ by gender, data from girls and boys were analyzed separately if supported by the models.

One strength of this data set is the diversity of the sample population. The majority of the sample in the current study is Hispanic and African American. This allows a primary focus on non-white adolescents and their families as the sample population in the current study is approximately 86% Hispanic and African American. Recent national studies include a broader representation of ethnic and racial experiences, nevertheless, more research that centralizes the experiences of non-white individuals and families are needed.

The PHDCN is a large interdisciplinary study with the goal of advancing the knowledge about psychological, social and behavioral development (Earls and Visser, 1997). The Longitudinal Cohort Study, a component of the PHDCN, focused on factors affecting adolescent development and has been used to explore individual, family and community factors that may contribute to adolescents' maladaptive behaviors. The study was chosen for its size, focus on parent and adolescent behaviors and longitudinal design.

Chapter 2: Theoretical Framework

The Systemic Family Development model (SFD, Laszloffy, 2002) is significant in that it focuses on the family as a social system and not just on an individual family member. The interdependency of individual members combines in a dynamic way that translates into the family functioning as a whole. Changes in one subsystem impact all other subsystems. This theoretical perspective supports the exploration of the quality of family relationships as a possible mediator between parent aggression and youth maladaptive behavior. Grounded in systems theory, SFD allows study of individual and family development emphasizing the bi-directional nature of the parent–adolescent relationship. Systems theorists view development as a process of interactions and transactions that are reciprocal in nature (O’Brien, 2005). “One person’s behavior affects another’s, whose response alters the behavior of the first, which then in turn again affects the other’s behavior” (O’Brien, 2005, pp. 885). Development occurs in a relational and transactional context. If parents are the main source for guidance and limit setting, and they use aggressive strategies to elicit desired behavior from their adolescent, the adolescent may not comply, the situation may escalate, and negative patterns may emerge. This model uses a systemic and developmental perspective to understand the complexity of the effects of parent aggression on adolescent behaviors over time while also exploring whether the quality of relationships with family and or friends mediates the relationships.

Systemic Family Development model is derived from an earlier family development theory that presented stage sensitive development throughout the family life course (Duvall & Hill, 1948). Laszloffy expands the earlier family development theory by viewing the family

in a more flexible way than had earlier family development theorists. Duvall's (1957) model poses eight stages of family development and is clearly based on the traditional, intact, nuclear family (see Duvall, 1957 for discussion). Laszloffy challenged the universality of the traditional nuclear family as well as the focus on a single generation. Viewing families in a multigenerational context rather than a single generational context acknowledges that at any time family processes effect more than a single generation of the family system. SFD (Laszloffy, 2002) and family development theory (Duvall, 1957) take into account individual and family development but emphasize the importance of the family as a group of interacting members that change over time.

The developmental tasks of a family with adolescents are well defined by Minuchin (1974). Parents play a key role in understanding and supporting the biological and social changes in their teenagers. The changes that adolescents face, for example puberty and increased access to friends, translate into their need for increased autonomy, more flexible and collaborative rule making and conflict resolution. Role changes accompany developmental transitions. Adolescent roles require increased responsibility taking, increased independent decision-making and problem solving. Parents' roles shift to allow more autonomy and include greater expectations for the teen. The parent-adolescent relationship revolves around the parent helping their adolescent balance autonomy and responsibility. At the same time, parents are responsible for clarifying family values regarding such issues as drug use, safe sex, school performance, and future goals. Adolescence is a time when the youth's interest in and need for approval from and connection with peers is paramount. These needs challenge past family structure and

boundaries and can prove stressful to family systems.

SFD also borrows from stress theory (McCubbin & Patterson, 1983) and posits that developmental transitions that families encounter create stress that challenges the family to shift relationships and roles, and to adapt (Laszloffy, 2002). Stress is defined as a pressure on the family. The family's stability is upset and it is not necessarily a negative thing. According to Boss (2002), stress "becomes problematic when the degree of stress (pressure or change) in the family system reaches a level (either too low or too high) at which time family members become dissatisfied or show symptoms of disturbance" (p. 61). A systematic interpretation of stress as defined within the SFD framework includes that if one member is stressed, the whole family is affected. Stress is not a singular event and does not necessarily incapacitate the family system, but it does elicit a response. Depending on the nature and perception of the stressor and the resources available to the family at the time, the family will either adapt and stabilize or experience a crisis that debilitates family functioning (Boss, 2002; McCubbin & Patterson, 1983). For example, in the case of this research, negative patterns emerge as the result of parental emotional and physical aggression because the stress of the aggression during adolescence overwhelms the family's ability to stabilize and flexibly adapt. Family functioning is compromised and without supports, negative patterns emerge. Parent aggression can be perceived as extreme by the youth who does not have the resources (coping skills, instrumental supports) to understand and manage the aggression. As a result, relationships with family and friends may be interrupted leading the youth to engage in externalizing or internalizing behaviors. When a stressor is resolved in a negative direction, and the family system does

not have the resources to manage the negative outcomes, family functioning decreases (Price, Price, & McKenry, 2010), resulting in a continuation of parent aggression.

Systemic Family Development model is unique in perceiving the idiosyncratic nature of stressors that appear across developmental stages and occur in the context of family. SFD would suggest that the effects of parent aggression on the quality of relationships with family and friends may lead to externalizing and internalizing behaviors during adolescence. This series of stressors during adolescence may reinforce negative family behavioral patterns.

Erickson (1968) postulated that adolescents strive to resolve the psychosocial crisis of group identity versus alienation. In order to accomplish this, adolescents need a secure family base from which to explore issues of belonging to peer groups outside of the immediate family. When parents provide a safe and nurturing home environment, youth are likely to be successful in achieving a sense of connection and loyalty to friends, as well as confidence in their ability to form meaningful relationships. According to Erickson (1968), youth who fail to meet this task are at risk for developing a sense of isolation and negative self-worth (internalizing behaviors) making them more vulnerable to engage in maladaptive behavior including aggression (externalizing behaviors). A nurturing, supportive family environment provides youth with a safety net as they navigate this complex developmental stage.

Parent aggression interrupts not only the adolescent's achievement of developmental tasks, but also leaves the parent vulnerable. Tasks in adulthood include balancing multiple roles for example, work, family and peers (Newman & Newman, 2012). In

a study by Crouter and Bumpus (2001), mothers working long hours felt overwhelmed, were less warm and accepting towards their adolescents, and experienced more conflict with their adolescents. Parents with adolescents are challenged by multiple roles. During this developmental stage, parents are faced with unpredictable and constantly changing adolescents and must be flexible in new situations in order to cope successfully (Newman & Newman, 2012). Aggressive disciplinary tactics disrupt the achievement of positive parent-adolescent relationships, leaving the parent at risk for negatively resolving their own stage salient tasks.

Another theoretical perspective used in this study is Coercion theory (Granic and Patterson, 2006; Patterson, 1982). This social interactional theory is primarily used to explain antisocial and delinquent behaviors, which translate into externalizing behaviors for this study. The theory postulates that aggressive patterns begin early on between parents and their children. Parents use coercive tactics to encourage compliance in their children, and over time negative patterns emerge where the parent uses aversive tactics, the child refuses to comply, and through social conditioning, the adolescent applies similar tactics with their parents. A cycle of negative interactions emerges between parent and adolescent and leads to “habitual and generalized aggression by children and a gradual loss of control over children’s behavior by parents” (Boxer, Lakin Gullen, & Mahoney, 2009, p. 107). Through socializing, adolescents learn to use similar coercive tactics with their parents, siblings and friends. This approach supports the bi-directionality of the association between parent aggression and youth externalizing behaviors over time.

The Systemic Family Development model (Laszloffy, 2002) provides a multilayered approach to consider both the negative patterns that emerge from parent aggression toward an adolescent, and the negative patterns that may emerge from negative youth behaviors toward a parent. SFD allows analysis of family behavior from a developmental and systemic perspective, linking family stress theory to behavioral outcomes. The combination of perspectives in this model, as well as the contributions from Coercion theory support an exploration of systemic family issues (cyclic patterns of violence), family and individual developmental issues, and the stage salient stressors associated with adolescence. These theories are uniquely suited to provide the framework necessary to test research hypotheses.

Chapter 3: Literature Review

Continuum of Parent Physical Aggression/ Corporal Punishment and Physical Abuse

In determining where the line is when punishment becomes abuse has been hotly debated and has resulted in culturally bound definitions (Gershoff, 2002). Corporal punishment has been banned throughout many countries of the world and in fact, any form of violence toward children was been denounced by the United Nations (Article 19 of the UN Convention on the Rights of Children, 1989). The United States and one other country, Somalia, are the only two countries that have not ratified this treaty to protect children and denounce any form of violence (Gershoff, 2010). In the United States, violence towards children is legally sanctioned in every state. State laws impact the view of whether a behavior constitutes abuse or neglect, for example in Florida, it is acceptable to use a belt to hit a child as long as the buckle is not used, where in other states it would be considered abuse because an object was used to hit the child (Faust, Chapman & Stewart, 2008).

Gershoff (2002) conducted a meta-analysis of 88 studies involving CP and found that one of the strongest links to physical abuse was physical punishment. One of the reported difficulties in the analysis was that states differ in their definitions, using vague language for corporal punishment that actually overlaps with definitions of abuse. Her definition of CP was adopted from Straus (1994). "Corporal punishment is the use of physical force with the intention of causing the child to experience pain but not injury for the purposes of correction or control of the child's behavior" (p. 4). A significant relationship between physical discipline and abuse was found in all ten studies that examined the relationship (Gershoff, 2002). This result amplifies the caution from child abuse researchers that CP,

because of its physical nature can escalate into physical abuse (Gelles & Straus, 1988; Graziano, 1994; Herrenkohl, Herrenkohl, & Egolf, 1983; Rodriguez, 2010; Wolfe, 1987), blurring the boundary between discipline and abuse. In a large majority of abuse cases, what began as discipline ended in injury to the youth. The meta-analysis explored a range of possible positive and negative child behavioral outcomes. In line with the current study, outcomes associated with aggressive and antisocial behaviors (consistent with externalizing behaviors) and those including mental health outcomes (consistent with internalizing behaviors) were explored. According to Gershoff (2010), after reviewing 12 studies for the effect of parent aggression on internalizing behaviors, all studies found a positive relationship between parent aggression and emotional distress. Similarly in 27 out of 27 studies exploring CP and aggression, Gershoff found the same positive relationship. The majority of research was performed on children and was cross sectional in design. Further analysis using longitudinal data regarding the effects of parent aggression during adolescence will provide insight into the development and continuation of maladaptive youth behaviors.

Gershoff's extensive analysis confirmed the placement of parent aggression on a continuum of violence from mild to severe, such that punishment administered too severely or too frequently resulted in abuse (2002; Gelles and Straus, 1988; Wolfe, 1987). This may be significant for adolescents for two reasons, first, because parents are typically larger and more powerful than their young teen, and when parent aggression is physical, there is always the risk of injury to the youth; and second, aggression from a parent may incite the teen to respond in a like manner. The fact that corporal punishment often escalates

(Gershoff, 2002) suggests that there is a component of emotional aggression from the parent toward the adolescent that is inherent in the interaction. This creates a more charged environment whereby the youth may strike back, supporting a developmental and systemic analysis of the family pattern (O'Brien, 2005), as well as the combination of psychological aggression and physical aggression in the definition of parent aggression.

Researchers have demonstrated that instances of parent aggression toward children resulting in or not resulting in injury have been comparable with regard to parent, child and socioeconomic characteristics (Gonzales, Durrant, Chabot, Trocme, & Browne, 2008 in Rodriguez, 2010). This means that there were no discernible differences in, for example, child age or parent educational level, as well as in poverty status, although in one study Straus and Donnelly (1993) found that the highest levels of CP were perpetrated in middle SES households. This suggests that parent aggression is largely subjective with acceptable levels referred to as discipline.

In the last 10 years there have been national studies that offer a more culturally inclusive exploration of family patterns and youth development. In a study by Grogan-Kaylor (2004) using The National Longitudinal Survey of Youth (NLSY), it was found that the detrimental effects of parents' use of CP did not differ by race or ethnicity. However, when age was introduced, findings suggested that as youth aged, African American and Hispanic youth displayed less antisocial behaviors than European American youth. Research investigating the potential differences in the relationship between CP and negative youth outcomes based on ethnicity and race has been contradictory. Some support differences in significant relationships (Pardini, Fite, & Burke, 2008; Deater-Deckard, Dodge, Bates, &

Pettit, 1996, Deater-Deckard & Dodge, 1997; Slade & Wissow, 2004; Stacks, Oshio, Gerard, & Roe, 2009), and some suggest that there are none (McLeod & Shanahan, 1993), and that differences that emerge are more related to contextual factors (Lau, Litrownik, Newton, Black, & Everson, 2006). Certainly the complexity of confounding issues that race, ethnicity, age, SES, and frequency of CP have on maladaptive youth behaviors present a complicated pattern of findings that suggest that CP is not consistently associated with behavior problems in the same way across all cultural groups.

While aggressive parenting strategies are highly prevalent in the U.S., it has been suggested that African American parents spank their children more frequently than parents of other ethnic groups (McLoyd & Smith, 2002). In a qualitative study on the use of corporal punishment by African American mothers, Taylor and Hamvas (2011) summarized themes that emerged for parents. They included (a) wanting to teach their children right from wrong; (b) CP emerged out of love and caring and further worked when all else failed; and (c) desire to teach the child respect and to ensure their safety (Taylor & Hamvas, 2011). Overall mothers in their study perceived that the use of parent aggression was a normative form of child discipline and taught their children how to be responsible adults. It has been suggested that living in communities where there has been high violence and crime, the most effective strategy to prevent children from entering a life of drug use crime and violence was CP. Unfortunately, its use has been associated with greater aggressiveness and antisocial behavior in youth (Gershoff, 2002). The use and acceptance of CP by African American families has been linked to biblical roots (Ellison, & Bradshaw, 2009), indicating

that religious leaders in the community could be potential resources for discussions about using non-aggressive discipline strategies.

A common definition utilized for CP is the intention to cause pain and not the intention to injure (Straus, 2000). It has been shown that up to 94% of parents employ this form of aggression to children by the time they reach 3 and 4 years of age (Straus & Stewart, 1999), and 74% of parents of youth aged 17 and under report that they spank their children (Gallup, 1995). Straus and Donnelly (1993) found that a parent hit approximately 48% of sons and 59% of daughters in grades 10 through 12. Unfortunately, parent aggression toward youth has long been an accepted form of discipline in the US, and it is striking to note that the same aggression perpetrated toward nonfamily members would be considered illegal (Kadzin & Benjet, 2003).

This perceived need to distinguish discipline from abuse (Gonzales, Durrant, Chabot, Trocme, & Browne, 2008), is based on the belief that one is harmful and one is not. As stated above, research supports the notions that parent aggression exists on a continuum of non-injurious to abusive acts (Gelles & Straus, 1988; Graziano, 1994; Herrenkohl, Herrenkohl, & Egolf, 1983; Rodriguez, 2010; Wolfe, 1987), and that non-injurious and injurious forms of punishment/abuse are linked with physical and emotional harm (English, Widom, & Branford, 2002; Gershoff, 2002, 2010; Maxfield & Widom, 1996; Smith & Thornberry, 1995; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001; Shields & Cicchetti, 1989; Widom, Schuck, & Raskin White, 2006; Zingraf, Leiter, Myers, & Johnson, 1993). Past research on CP of younger children has been overwhelmingly consistent in demonstrating its ineffectiveness as well as its potential harm (Gelles & Straus, 1988; Gershoff, 2002, 2010;

Graziano, 1994; Herrenkohl, Herrenkohl, & Egolf, 1983; Horner, 2011; Kadzin & Benjet, 2003; Rodriguez, 2010; Wolfe, 1987). Therefore, conceptualizing parent aggression as any form of physical or emotional aggression toward an adolescent, and assessing the subsequent negative patterns of parent/adolescent interactions that emerge expands current knowledge in the field of adolescent development and parent aggression.

The range of parent physical aggression is defined as spanking, which includes hitting an adolescent with an open hand on the buttocks or extremities with the intent to discipline without leaving a bruise, or causing physical harm (Baumrind, Larzelere, & Cowan, 2002) to more severe forms of CP that include pushing, shoving and hitting with an object (Straus, 1983). Slapping and spanking is considered normative for young children and adolescents in this culture, however teens often interpret the behavior as demeaning (Straus & Donnelly, 1993), which adds a level of emotional harm on top of the experience of physical harm. Negative psychologically aggressive acts toward the adolescent include for example, ignoring, blaming, threatening and name calling, and are included in the definition of parent aggression.

Physical Abuse

When discussing adolescent abuse as opposed to CP, the focus of research revolves around harm to the youth rather than parent behaviors considered abusive (Sedlak, Mettenburg, Basena, Petta, McPherson, Greene, & Spencer, 2010; U.S. Department of Health and Human Services, 2010). The current official definition for physical abuse is non-accidental physical injury that ranges from bruising to severe fractures or death. The injuries are a result of punching, kicking, hitting, (with a hand, fist, or object), beating, biting,

burning, throwing, stabbing, shaking, or otherwise harming a child. The harm is inflicted by a parent or caregiver responsible for the child's care, and is considered abuse whether the adult intended harm or not (Child Welfare Information Gateway Fact Sheet, 2008). A child, according to CAPTA, is any individual under the age of eighteen years. This federal legislation represents the minimum standard that states must meet, and as mentioned earlier, states vary on their definition of abuse.

The literature on abuse is rich in terms of the detrimental effects on children and adolescents (English, Widom, & Branford, 2002; Maxfield & Widom, 1996; Smith & Thornberry, 1995; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001; Shields & Cicchetti, 1989; Widom, Schuck, & Raskin White, 2006; Zingraff, Leiter, Myers, & Johnson, 1993). There are however methodological challenges related to how abuse is measured, which affects the extent it is reported to be experienced in the U.S. Official sources (CPS substantiated cases) include only a fraction of the total number of cases that are identified (Sedlak & Broadhurst, 1996). Researchers have found little support for using only substantiated reports and in fact, have found no difference between substantiated reports and unsubstantiated reports (Leiter, Myers, & Zingraff, 1994; Kohls, Jonson-Reid, & Drake, 2009). Research suggests that unsubstantiated cases of maltreatment have similar rates of recurrence, delinquency, and juvenile incarceration (Johnson-Reid, 2002; Leiter, Myers, & Zingraff, 1994). In fact, several studies use the total number of reported cases rather than the number of substantiated cases in their research because the groups have been shown to be similar (e.g., Kerr, Black, & Krishnakumar, 2000).

This is a significant issue for adolescents because instances of adolescent abuse are often not reported (Smith, Ireland, & Thornberry, 2005). Contrary to the experience of young children, adolescents are not viewed under the same lens by teachers and other adults who hold the responsibility of reporting abuse. Even with personal disclosure of abuse, adolescents' age and size make it more likely that they are blamed for the abuse they receive. Therefore, official sources have been shown to greatly underestimate the occurrence of abuse in general and more specifically, adolescent abuse. These issues contribute to a cautionary stance of relying on official sources only for accurate numbers of abused adolescents. As a result, this study uses unofficial sources (parent reports) rather than official sources (CPS reports) for the abuse determination.

There are two main sources of national data on child abuse occurrence in the United States. They are the National Incidence Studies, the most current being the NIS-4 (Sedlak, Mettenburg, Basena, Petta, McPherson, Greene, & Spencer, 2010), and Child Maltreatment 2008 (U.S. Department of Health and Human Services, 2010). The major difference between the two sources is how they collect their data on child abuse and neglect. The NIS-4 gathers data from multiple sources including child protective services (CPS), law enforcement, juvenile probation, public health, hospitals, day care, schools, mental health and social service agencies and reports on abuse in the year 2006. Child Maltreatment 2008 gathered only CPS data from individual child protective agencies through the National Child Abuse and Neglect Data System (NCANDS) from each state and is considered official data.

The NIS-4 (2010) includes estimates of both official statistics from child protection agencies, and information gained from community professionals (sentinels). The NIS-4,

mandated by Congress, provides a comprehensive assessment of the nation's abused and neglected children, and uses two separate standards with which they gather information and define child abuse. According to the NIS-4 (2010), the two standards of child abuse utilized are identified as the *Harm Standard* and the *Endangerment Standard*. These standards produce differing pictures of the prevalence of child abuse. The Harm Standard, being more stringent, must have an act or omission that *results in harm* to a child. Critics of this standard rightfully point out that the abuse many children have experienced and that was substantiated by child protective services does not meet this stringent standard of harm (Sedlak et al., 2010). Following this logic, the prevalence of child abuse reported by the NIS-4 (2010), utilizing the Harm Standard also is underestimated.

The Endangerment Standard, being the most encompassing of the standards, includes evidence that the child *had been harmed* as well as those children reported at *significant risk* of harm. According to the NIS-4, this standard is slightly more lenient than the harm standard. Utilizing the Endangerment Standard of child abuse from the NIS-4, an estimated 835,000 children were abused during the 2005–2006 study year (Sedlak et al., 2010). Under this standard, most abused children were physically abused (57%, or 476,000 children) and about one third of children experienced emotional aggression (36% or 302,600). The NIS-4 (2010) data indicated that girls were abused (total abuse) at higher rates than were boys. Both the Harm Standard and the Endangerment Standard supported that girls are abused at a slightly higher rate than boys. It appears that girls over the age of 13 make up the bulk of abuse reports identified in the NIS-4 and from the previous NIS report (1996), even though there were decreases in the overall rates of physical and emotional

abuse (girls and boys), girls' abuse decreased less than that of boys. The NIS-4 also reports that the rates of maltreatment (a combination of abuse and neglect) were lowest for infants and increased throughout childhood, leveling off and remaining steady during adolescence.

Smith et al. (2005) found that 25% to 45% of *maltreated* youth are adolescents. Specific to physical abuse, the National Child Abuse and Neglect Data System (NCANDS; 2008), reported that teens under the age of 18 made up 40.7% (n=36,463) of indicated *physical abuse* in the United States. This however, may be a low estimate for a few reasons. Typically child protective agencies are slower to indicate reports on adolescents because age and size make adolescents less likely to be seriously injured than younger children. Adolescence is a time of greater emotional volatility and as such is gives the impression that youth instigate and are responsible for the resulting abuse (Pelcovitz et al., 2000). As stated earlier, substantiated or official reports have been found to be low estimates of the actual number of abused youth (Sedlak et al., 2010). Kaplan, Sunday, Labruna, Pelcovitz, & Salzinger (2009) reported that maltreatment “represents a major, adolescent public health problem” (p. 273) that remains understudied, and as such will only continue to increase, reinforcing the urgent need for research.

Other characteristics identified in the NIS-4 included the fact that African American children had the highest rate of abuse when compared with White and Hispanic children. Children with disabilities were abused at lower rates, but when there was abuse, disabled children were more likely to suffer serious injury (Sedlak et al., 2010). Finally, when compared to children with employed parents, those with no parent in the paid workforce were twice as likely to experience abuse. Children with two biological parents experienced

the least abuse, while children living with one biological parent and a cohabitating other adult experienced the highest rate of abuse. The male caregiver was more often the abuser when not related to the child (61% compared to 41% female abusers), whereas in situations where the abuse was perpetrated by biological parents, mothers and fathers were just as likely to be the abusers (51% and 54% respectively; Sedlak et al., 2010).

Emotional Aggression

Emotional aggression, otherwise known as psychological aggression or psychological abuse has been found to co-occur with others forms of CP and abuse (Mennen, Kim, Sang, & Trickett, 2010) and is evidenced by verbal abuse, developmentally inappropriate expectations, or excessive demands on performance (Trickett, Negriff, Ji, & Peckins, 2011). Iwanic (2006) describes emotional aggression as the “core of all major forms of abuse and neglect, and is more damaging in its impact than acts of physical abuse (and sexual abuse) alone” (p.4). Verbal aggression (insulting, swearing, and threatening) may create higher stress in the developing youth and influence internalizing and externalizing behaviors (Spertus, Wong, Halligan, & Sermitis, 2003; Vissing, Straus, Gelles, & Harrop, 1991).

The current, official definition of emotional abuse is: “injury to the psychological capacity or emotional stability of the child as evidenced by an observable or substantial change in behavior, emotional response, or cognition” and injury as evidenced by “anxiety, depression, withdrawal, or aggressive behavior” (Child Welfare Information Gateway, 2011). Emotional aggression has been operationalized as spurning (e.g., child is blamed for adult problems, name calling, cursing at child), terrorizing (e.g., parent threatens the child with harm, child subjected to extreme negativity or hostility), isolating (e.g., parent interferes

with other relationships, child is confined or isolated), and exploiting/corrupting (e.g., child is forced to assume inappropriate responsibility, child involved in illegal activity).

Historically, emotional aggression has not received the same attention as physical and sexual abuse and neglect as evidenced by the lack of an official federal definition (Trickett, Mennen, Kim, & Sang, 2009). The task of defining emotional abuse was left to individual states, which hampered researchers because of inconsistencies between states and vague descriptors. Trickett and colleagues (2009), used a system of operationalizing emotional abuse created by Brassard and Donovan (2006) which, resulted in identifying many more children as being emotionally abused than were first identified by the state child protective agency. The Maltreatment Case Record Extraction Instrument was the framework used to examine the entire case record and assign specific markers based on the subsystems created by Brassard and Donovan (2006), and demonstrated that 63% of emotionally abused adolescents also experienced physical abuse (Trickett, Mennen, & Sang, 2009). Additionally, Kaplan and colleagues conducted a review of adolescent abuse and neglect literature from 1988 through 1998, and concluded that emotional abuse was found in a large majority of physical abuse cases (1999; Claussen & Crittendon, 1991). It was their finding that emotional abuse might be the most frequent form of abuse that adolescents and children experience.

Parent Aggression and Detrimental Youth Outcomes

According to SFD and given that adolescence is a developmental period for enhancing personal and interpersonal skills; teens strive for autonomy, identity, and peer acceptance. At the same their cognitive capacity becomes more sophisticated and they

grow bigger and stronger (Doueck, Ishisaka, & Greenaway, 1988). Some researchers suggest that adolescence is a time of greater familial stress, which in and of itself could contribute to parent aggression (e.g., Lourie, 1977, 1979). The emergence of a child into an adolescent results in a drastically different time in the family's development. This transition is characterized by intense changes in relationships with friends and family, self-concept and physical development (Petersen, Kennedy, & Sullivan, 1991). Physical and emotional aggression by primary caregivers raises different issues for adolescents than they do for children. "Teenagers are far more capable of abstract thought than are children and can independently evaluate their own motives as well as those of others" (Garbarino, 1989, p. 221). This means that adolescents may have greater difficulty accepting physical aggression from their parents. In situations where youth attempt to renegotiate limits and assert their independence to expand their sense of self, parents must be willing and able to reexamine control, and provide support to their developing teen with expectations of added responsibility balanced with greater freedom. When this is not the case and a youth is faced with parental aggression, it becomes difficult for the youth to adapt in socially appropriate ways. Other developmental researchers discuss adolescence as a time when there are dramatic transformations in the youth and in their relationships with parents' and suggest that without a shift in power to accommodate the adolescent's growth, conflicts may become physical (Lourie, 1977, 1979; Hartup, 1992).

The detrimental effects of parental physical aggression in the form of abuse on negative youth outcomes are well documented. For example, Bolger and Patterson (2001) demonstrated the internalizing (e.g., low self-esteem, depression, anxiety) effects from a

maltreating environment. Their study involved younger children up to the age of 12, was longitudinal, and included a comparison group of children matched on age and SES who identified as non-maltreated. Findings also supported the negative association between parent aggression and internalizing behaviors for this younger group of children.

Both theory and research has suggested that parental physical and emotional aggression are likely to undermine adolescent efforts to express autonomy and relatedness. The youth's sense of confidence in connection with their parents is damaged, adding to feelings of depression and anxiety. According to Bender and colleagues (2007), parent aggression during adolescence translates into both a parent/adolescent bond that is too fragile to survive autonomy, and a connection devoid of warmth, thereby affecting parent/adolescent relatedness. Their study found evidence for both internalizing and externalizing behaviors as a result of a history of harsh parenting that included both emotional and physical aggression. Their study had several methodological weaknesses including its cross-sectional design, small sample size (141 adolescents), and higher risk nature of the adolescent sample involved. The current study attends to each of those weaknesses.

Smith and Thornberry (1995) suggest that experiences of abuse in adolescence are related specifically to youth violent offenses. Their study looked at several types of abuse that occurred prior to the youth's 12th birthday and their influence on youth externalizing and internalizing behaviors. The study relied on official and self-report data, which lends support for its methodological strategy because of the broad base of data reviewed. The temporal order of maltreatment and youth externalizing behaviors was addressed and

findings indicated that the occurrence of maltreatment preceded externalizing behaviors in their sample. Many other researchers have made the link between abuse and depression and other internalizing problems (Toth, Manly, & Cicchetti, 1992; Kaplan, Pelcovitz, & Labruna, 1998; Lewis, Kotch, Wiley, et al., 2010), and externalizing behaviors (Loeber & Dishion, 1983; Stuewig & McCloskey, 2005).

Patterson and colleagues (1989) demonstrated with a series of structural equation model studies that disruptive parent practices are causally related to youth antisocial behavior through a coercive family process that emerges as a result of parent aggression (Patterson, 1982; Patterson, DeBaryshe, & Ramsey, 1989). Coercion theory (Patterson, 1982; Patterson, Reid, & Dishion, 1992; Reid, Patterson, & Snyder, 2002) lends some insight to possible patterns at work in the parent/adolescent relationship regarding the development of antisocial behaviors, which include more externalizing behaviors than internalizing behaviors. At its most basic level, coercion theory describes a process by which parents and children mutually “train each other to behave in ways that increase the possibility that children will develop aggressive behavior problems and that parent’s control over these aversive behaviors will decrease” (Granic, & Patterson, 2006, p. 101). A cycle begins where the youth’s behavior is a reaction to the parent’s behaviors and then in turn becomes a stimulus for the parent’s behavior (Granic & Patterson, 2006; Patterson, 1982). It has been demonstrated that adolescence can be a tumultuous stage in the family life cycle in which the youth’s need for independence and the parents’ need for control create a tension that Straus (1988) suggests may be exacerbated in an abusive context, where negative, conflictual, and violent patterns may emerge. Consistent with a systemic and

developmental perspective, identifying a process through which this occurs in adolescence may help to explain more than the direct effects of parent aggression on the development of internalizing and externalizing behaviors. This study explores those direct effects during early and middle adolescence and extends that to examining temporal connections between the variables over time, and the possible indirect effects of the quality of relationships with family and friends.

Emotional aggression by parents has begun to receive more attention in the research. Findings suggest that there are associations between emotional aggression and depression, anxiety, eating disorders, aggression, and antisocial behavior in adolescents (Allison, Grilo, Masheb, & Stunkard, 2007; McCullough, Miller, & Johnson, 2010). According to Trickett and colleagues (2009), the dynamic of adolescent abuse includes a form of parenting that consists of a pattern of harsh corporal punishment, rejection, and low familial warmth that has devastating effects on the adolescent.

In a study by Albrecht, Galambos, & Jansson (2007), the association between what they termed “psychological control” by parents, and youth internalizing and externalizing behaviors was explored. Their definition of psychological control, “use of love withdrawal, guilt induction, and criticism” (p. 673) is contained within the definition of emotional aggression. One of the important contributions that their research added to the literature on emotional aggression was the temporal connection between the effects of parent behavior on adolescent behavioral outcomes. Surprisingly, they concluded that parent psychological control at T1 did not predict adolescent behaviors at T2 but that youth internalizing and externalizing behaviors at T1 predicted parent psychological control at T2.

Their study only assessed the effects of parent psychological control on internalizing and externalizing behaviors. The current investigation expands that to parent aggression including both emotional and physical aggression. Viewed developmentally, parental aggression impedes adolescents' sense of autonomy, which is a crucial stage salient task (Erikson, 1968; Newman & Newman, 2012), and thus has implications for adolescent adjustment.

Parent aggression has been identified as a major influence on adolescent development (Mazefsky & Farrell, 2005). The range of parental aggressive behaviors included in this study include, emotional aggression (e.g., blaming, threatening, swearing at), and physical aggression (e.g., slapping, hitting, pushing, grabbing, beating up), and both interact with family and individual development such that developmental tasks are impeded and wellbeing for all family members is affected. This study conceptualizes parent aggression as physical and psychological aggression because, especially during adolescence, a youth interpret physical aggression as unjust (Garbarino, 1989).

Gender and Parent Aggression

The influence of gender on forms of parent aggression and the negative patterns of behavior that emerge in adolescence are unclear. In a review of the literature on child and adolescent abuse and neglect, Kaplan and colleagues reported that overall, girls and boys did not differ in the incidence of physical and emotional maltreatment (1998). They did however conclude that gender distribution might vary with age in that more adolescent girls over the age of 15 experienced physical abuse than boys (1998; Powers, Eckenrode, & Jaklitsch, 1990).

Much research has indicated that the occurrence of abuse is associated with internalizing behavior in girls and externalizing behavior in boys (Galambos, Berenbaum, & McHale, 2009; McGee, Wolfe, & Wilson, 1997; Trickett & McBride-Chang, 1995). Trickett, Kim, & Prindle (2011) assessed data from 303 young adolescents (9-12 years old) to examine the outcomes from multiple maltreatment experiences. Using a hierarchical cluster analysis to examine outcomes from combinations of maltreatment types, they found a somewhat different dynamic. In their study, boys who experienced both emotional and physical abuse demonstrated more difficulties than girls in both internalizing and externalizing behaviors.

Research on gender differences in development suggest that girls value intimacy, trust, and closeness in their relationships (Coyne, Archer, & Elsea, 2006; Crick et al., 2002; Zahn-Waxler, Crick, Shirtcliff, & Woods, 2006), while boys focus on physical and instrumental competence in their relationships (Bukowski, Newcomb, & Hartup, 1996). Because girls are more likely to focus on the relational aspects in situations of abuse they may be more sensitive to the loss of love and trust from their primary caregiver (Cullerton-Sen et al., 2008) and at the same time may be more effected by the presence or absence of positive peer relationships. Formosa, Gonzales, and Aiken (2000) conducted a study to test the protective function of parental attachment and parental monitoring for adolescents living in conflictual homes. Specifically they were examining whether parent attachment and monitoring moderated the relationship between family conflict and conduct problems (externalizing behaviors). Their findings indicated that stronger bonds between adolescent girls and their mothers and monitoring by both their father and mother acted as protective factors in conflictual family situations. When connection with the mother and monitoring by

the mother and father was high, girls' externalizing behaviors decreased. Boys however, experienced the opposite. Boys in conflictual family situations sought greater autonomy from parents and rejected their monitoring and supervision, which lead to an increase in externalizing behaviors. A possible explanation could be that as a function of gender socialization, boys experience greater independence from family, where girls are more protected.

In recent decades the importance of gender and age in the developmental exploration of the effects of parent aggression on maladaptive behavior has brought to light significant differences in experiences. We have clearly moved from accepting research that is based on one sex and generalizing findings to all youth. What is lacking is an exploration from a systemic family development perspective that will provide a way to understand how the stress of parent aggression on an adolescent interacts with individual and family development to result in negative youth outcomes. Additionally, assessing youth internalizing and externalizing behaviors as both the result of parent aggression and a contributing influence on continued parent aggression between early and middle adolescence provides insight into the complexity of family patterns for more effective treatment interventions.

Summary of Literature

Using systemic family development model (SFD; Laszloffy, 2002), this review has defined and explored the issue of parent physical and emotional aggression and its association with youth internalizing and externalizing behaviors, and the negative behavior patterns that may emerge. The use of aggressive parenting strategies interrupts mastery of

crucial developmental and relational milestones, leaving a youth and family vulnerable to future relational difficulties. Additionally, since families as systems operate in such a way that the behavior of one member effects the behavior of the whole system, creating cyclical patterns, this study will examine not only how parent aggression is connected to internalizing and externalizing behaviors but also whether those negative behaviors at T1 predict continued parent aggression at T2.

Laszloffy's contribution to family development theory allows scholars to view multiple developmental transitions (individual and family) interacting with each other and the family environment. Her inclusion of stress theory into SFD provides a very usable model to conceptualize the effect of stress on families, and how that can result in either positive coping, growth and adaptation or result in negative behavior that can cycle back to high levels of stress and maladaptation. Individual and family developmental processes are complex, especially when negative and harmful patterns emerge.

Table 1. Summary of Hypotheses

Hypothesis 1	Parental physical and emotional aggression are consistently associated with youth externalizing and internalizing behaviors during early and middle adolescence, while controlling for poverty status, ethnicity and marital status.
Hypothesis 2	Parental physical and emotional aggression and youth externalizing, and externalizing behaviors are stable throughout early and middle adolescence
Hypothesis 3	Parental physical and emotional aggression in early adolescence predicts youth externalizing and internalizing behaviors in middle adolescence, and youth externalizing and internalizing behaviors in early adolescence predicts parental

physical and emotional aggression in middle adolescence.

Hypothesis 4 The quality of relationships with friends and/or family mediates the effect of parental physical and emotional aggression on behavioral outcomes for both boys and girls.

Chapter 4: Conceptual Model

The conceptual model for the current study is presented in Figure 1. Parental physical and emotional aggression and youth externalizing behaviors were measured during 2 waves of the Longitudinal Cohort Study so that co-occurrence and stability of the constructs as well as temporal relationships can be assessed. It is expected that the constructs are fairly stable over time because, according to Rodriguez (2010), parents who use aggressive tactics (physical and emotional) with their youth do so out of an over reactive, and authoritarian parenting style rather than demonstrating the behaviors in isolated instances. With regard to internalizing and externalizing behaviors and the negative parent/adolescent patterns cited in previous studies youth maladaptive behaviors are also expected to be stable over time. Additionally, it is anticipated that there are direct relationships between parent aggression and youth externalizing and internalizing behaviors at both points in time, based on prior research findings (Crick, & Zahn-Waxler, 2003; Kaplan et al., 1998; Lewis, Kotch, Wiley, et al., 2010; Loeber & Dishion, 1983; Smith and Thornberry, 1995; Toth, Manly, & Cicchetti, 1992; Stuewig & McCloskey, 2005).

The quality of relationship with family and the quality of relationship with friends were measured at T1 only. These relationships are conceptualized as potential resources that influence adolescent externalizing and internalizing behaviors. According to SFD, if the stress of parental aggression negatively impacts the support resources received from family and or peer relationships, the youth is at risk for experiencing maladaptive behavior.

Parental aggression then is conceptualized as the initial stressor interrupting normative adolescent developmental trajectories.

Based on findings from Patterson et al. (1992) and Granic and Patterson, (2006) it is expected that parent aggression during early adolescence will predict youth externalizing and internalizing behaviors during middle adolescence as part of a negative pattern of parent/adolescent behaviors. The cited studies found temporal connections between physical abuse and youth maladaptive behaviors and emotional abuse and youth maladaptive behaviors. It is important to note that the studies by Patterson et al. (1992), and Granic and Patterson (2006) were conducted with youth who experienced physical and emotional abuse. The current study focuses on parent aggression that may or may not reach the definition of abuse, and in fact, the sample population in the current study reported relatively low levels of parent aggression. Even so, the current study hypothesizes that similar patterns of parent aggression and youth maladaptive behaviors will be demonstrated.

In the absence of studies that have examined the effects of early adolescent externalizing and internalizing behaviors on continued parent aggression during middle adolescence, this study hypothesizes a positive relationship between the constructs, establishing a temporal connection. Grounded in systemic and developmental theories, SFD emphasizes that there is a bi-directional influence between parent and adolescent behaviors (O'Brien, 2005; Sameroff, 1995), which effect individual and family development (Lazloffy, 2002). Additionally, SFD would suggest that maladaptive youth behaviors are the result of the stress of parent aggression and, if resources (including quality relationships with family

and friends) are not present to counter the stress and assist the youth to develop adequate coping skills, youth will continue demonstrate maladaptive behaviors. These maladaptive behaviors then contribute to the overall family stress and contribute to continued parent aggression. Granic and Patterson (1982) also describe this circular pattern as part of a coercive dynamic present in a family system.

This study is positioned to explore both the contemporaneous and long-term effects of parental aggression on maladaptive youth behavior. The complex interactive nature of individual and family development recognized in SFD provides the framework to understand the dynamics at work, and the negative patterns that emerge. Ongoing stress on the family has an additive effect. The stress involved in parental aggression towards an adolescent, may overwhelm the youth, discouraging positive adaptation and increasing the likelihood of maladaptive behavior. Additionally, the interaction between parental and youth maladaptive behavior supports the continuation of a negative cycle of violence in the family system.

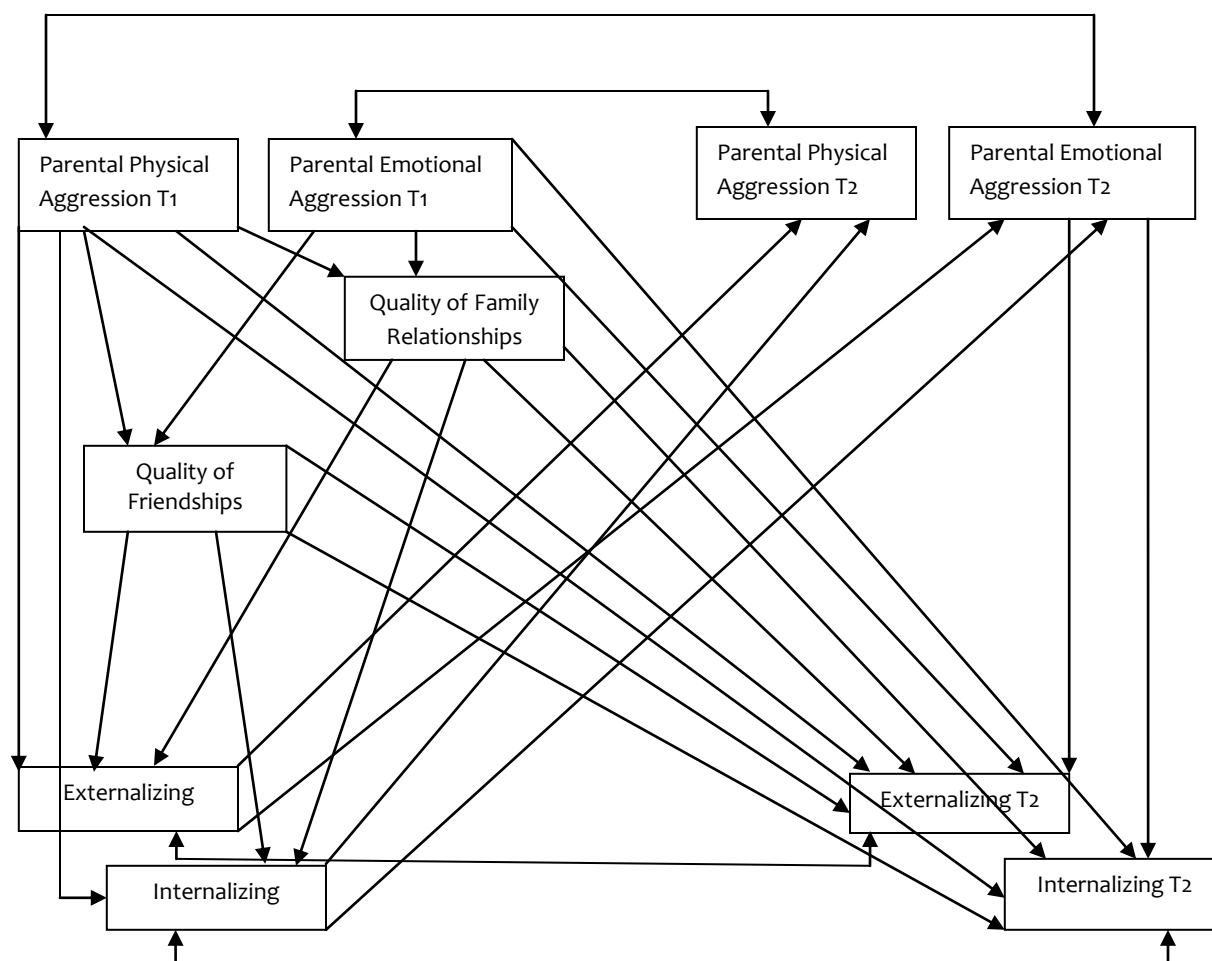


Figure 1: Conceptual Model of Parent Aggression and Youth Externalizing and Internalizing Behaviors, T1 and T2

Chapter 5: Research Design and Methods

PHDCN Brief Overview

The data from this study were drawn from the Project on Human Development in Chicago Neighborhoods: Longitudinal Cohort Study, 1994-2001 (PHDCN). The main focus of the Longitudinal Cohort Study was to investigate both positive and negative developmental pathways associated with delinquency, substance use and violence in adolescents and their families in diverse communities. The project consists of three waves of data collected over approximately seven years from a sample of pre-adolescents, adolescents and their caregivers (Earls, 2002).

The scientific directors of the original study selected Chicago over other U.S. cities due to its stable and well defined neighborhoods, large population and tremendous diversity in terms of race, ethnicity, and socioeconomic status, which allows for important comparisons (Earls, & Buka, 1997).

Original Study Sample

Participants for The Longitudinal Cohort Study were selected using a three-stage stratified sampling design. Beginning with census data, researchers formed 343 neighborhood clusters (NC's) from 847 census tracts, which included the residents of Chicago. The neighborhood census data was used to construct two stratification variables: The first, neighborhood clusters, were stratified by seven layers of racial-ethnic composition and the second stratification variable was based on socioeconomic status (low, medium, and high SES). The original sampling process resulted in various gaps in the diversity of neighborhood clusters. For example, neighborhoods with predominately White and low

SES, predominately Hispanic and high SES, or Hispanic and Black mixed and high SES was not available for the final sample (Paquette Booth, & Warham, 2009). Hence, a stratified probability sample of 77 neighborhood clusters was selected for the study. The final stage of the sampling design included randomly selecting block groups from each of the 77 neighborhood clusters, and children between the ages of birth and 18 were sampled from randomly selected households. The longitudinal study identified approximately 8,000 participants, which were divided into seven age cohorts and included 800-900 youth in each cohort (Earls, & Buka, 1997).

Assessment Protocols

A team of researchers and research assistants, along with the PI, conducted extensive coordinated studies utilizing 95 different assessments of 8,000 randomly selected adolescents and young adults. The assessment protocols were developed in three different languages (Spanish, English, and Polish). The research team was trained to work with families and individuals participating in the study. The majority of the data was collected through intensive in-home interviews and standardized assessments with the adolescents and their primary caregivers. Participants were paid between \$5 and \$20 per interview and the research team created other incentives for participation, including for example, complimentary passes to community activities.

The first wave of data was collected between 1994 and 1997 with a 75% (N= 6,228) response rate. Wave 2 data were collected between 1997 and 1999 and included an 86% (N= 5338) response rate, and wave 3 was collected between 2000 and 2001 and had a response rate of 78% (N= 4850).

Sample Selection for the Current Study

The current study utilized the 12 year-old cohort from the PHDCN (collected in wave 1, 1995) and followed the participants into wave 2 (collected in 1997). Participants chosen for this study were required to have complete data for the parent aggression, externalizing and internalizing behaviors scores, for both waves of the study. Out of a possible 848 participants from the original study, 567 subjects had complete data on the variables of interest and thus were chosen for the current study.

Measures

Parent aggression. The prevalence of parents' aggression toward their adolescents (wave 1 and 2) was assessed by items drawn from the parent/child version of the Conflict Tactics Scale (CTSS; Straus, 1979). According to Straus and colleagues (1998), the scale assesses strategies that a parent may use when interacting with their child. The CTSS includes psychological strategies (e.g., "swore at me, shouted, blamed me"), and physical aggression strategies (e.g., "hit me with a fist, or an object"). The psychological aggression strategies were developed to assess psychological acts intended to scare or intimidate the youth while the physical aggression acts were intended to assess a variety of parental physically assaultive behaviors. In this study, the physical aggression subscale contains 7 items (threw something at, pushed/grabbed, slapped, kicked, hit with something, beat and burned scalded), and the emotional aggression subscale includes 6 items (swore at, stomped out, cried, said things to spite, threatened to hit, and threw something). This separation by subscale is consistent with Smith Slep, & O'leary (2007).

The CTSS has been used extensively for studies of parent-adolescent aggression (Elben, 1987; Harold, Fincham, Osborne, & Conger, 1997; Miller, Downs, & Gondoli, 1989; Straus & Gelles, 1990; Straus & Hamby, 1997; Yodanis, Hill, & Straus, 1997; Zuravin, 1989). Rather than assessing actual harm to a child, the instrument assesses parent aggression toward the child, whether the child was injured or not (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). This study defines parent aggression as both physical and emotional aggression directed from the parent to the youth. This study explores the prevalence of the types of parent aggression so that items from T1 that assessed frequency were recoded into a dichotomous variable where 1 = parent aggression and 0 = no parental aggression. The sum of the scores for each subscale was used in the analysis. The Conflict Tactics Scale has been a widely used instrument for research on intrafamilial violence, corporal punishment, and maltreatment (e. g., Straus, 1979; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998).

Primary caregivers responded to 22 items associated with aggression toward their adolescent. In this study, a total of 13 items representing the subscale of physical aggression and the subscale of emotional aggression were used to assess parent aggression. The study assesses the unique contribution of each form of parental aggression on the adolescent. One item from The Conflict Tactics scale was removed, “the number of times the PC sulked and refused to talk”, since it was not included on the scale at T2. The remaining items used in this investigation to assess parent aggression were identical at T1 and T2, and had adequate reliability (emotional aggression at T1, $\alpha = .68$; physical aggression, $\alpha = .65$; and at T2 emotional aggression, $\alpha = .69$, and physical aggression, $\alpha = .60$).

The quality of relationships with friends and family. Adolescents completed the

Provision of Social Relationships, Subject (PSRS; Turner, Frankel, & Levin, 1983), a 20-item scale used to evaluate the social support from family and friends. The instrument assessed the quality of the adolescent's relationships between friends, family and others (non-family). The Provision of Social Relationships was only administered at T1. Subjects responded to the following scale: 1 = very true, 2 for somewhat true, and 3 for not true.

The scale has three subscales including assessment of relationships with friends, family and others. For this research the subscales for friends and family were used. Missing data for each scale was under 1% and was replaced with the mean. PCA was used to determine the best fit for the data. One component was extracted for the subscale friends, all items loaded well except for "even with friends I feel alone" (-.319), and was removed. All other items loaded well (.548-.678) and explained 35% of the variance.

PCA was used for the family subscale. One component was extracted and all items loaded well except for "sometimes I'm not sure I can rely on my family" (-.335), and was removed. The scale was rerun with the remaining items and they all loaded well (.409-.697) and explained 33.8% of the variance. The scale was reversed for ease of interpretation so that the higher the response, the higher the quality of the relationship. Participants at T1 responded to the following items: With friends I am able to relax; I share the same approach to life as friends; I know my friends enjoy doing things with me; I have at least one friend that I can tell anything to; I feel very close to some friends; and Friends would take time to talk with me about problems. The alpha coefficient for the quality of relationships with friends was .65.

Items for the quality of relationships with family included: I know my family will always be there for me; My family tells me they think I'm valuable; My family has confidence in me; My family helps me solve problems; I know my family will always stand by me; I have a grandparent/uncle/aunt that I feel close to; and I have a sibling/cousin who listens/understands me. The alpha coefficient for the quality of relationships with friends was .81. The remaining items on this scale assessed the quality of relationships with others and were not included in this study.

Internalizing and externalizing behaviors. Internalizing and externalizing behaviors were assessed using the Child Behavior Checklist (CBCL, Achenbach, 1991) and were completed by the primary caregivers of the subjects at T1 and T2 of this study. Externalizing and internalizing behaviors represent broad based groupings of syndromes. The total externalizing behavior scale combines the delinquent behavior (13 items), and aggressive behavior (20 items) subscales (T1, $M = 10.70$, $SD = 8.48$, range= 0-59; T2, $M = 7.95$, $SD = 6.86$, range=0-39). Internalizing behavior combines withdrawn (9 items), somatic complaints (9 items), and anxious/depressed (14 items) subscales from the CBCL, and was assessed at T1 and T2 (T1, $M = 8.01$, $SD = 6.85$; T2, $M = 9.21$, $SD = 7.65$). Participants responded to the instrument by labeling statements as not true, somewhat true, and very true (scored as 0, 1, or 2). The alpha coefficients for internalizing behaviors at T1 and T2 for the current study was T1= .71 and T2= .75. The alpha coefficients for externalizing behaviors at T1 and T2 for the current study was T1 = .60 and T2= .67.

Chapter 6: Analytic Strategy

The overarching goal of this investigation was to advance our understanding about the consequences of parent aggression (emotional and physical) toward adolescents from a developmental perspective. Specifically this study explored: 1. whether parent aggression co-occurs with youth externalizing and internalizing behaviors during early and middle adolescence while controlling for poverty status, ethnicity and marital status; 2. whether parent aggression and youth externalizing and internalizing behaviors were stable through early and middle adolescence; 3. whether the quality of relationships with family and friends mediates the relationship between parental aggression and negative youth outcomes; 4. whether parent aggression in early adolescence predicts youth externalizing and internalizing behaviors in middle adolescence, and youth externalizing and internalizing behaviors in early adolescence predict parent aggression in middle adolescence. A test of the moderating effects of gender on the impact of parent aggression on behavioral outcomes was also included.

Missing Data

The original data set was comprised of 848 individuals. 567 subjects had complete data on the key variables of interest and therefore are included in the current study. Missing data from other constructs such as “The Provision of Social Relationships Scale” was under 5% and were replaced with the mean (Beale, & Little, 1975).

Plan of Analysis

Normalizing data. An assumption in multivariate analyses is that all the variables must be normally distributed (Burdenski, 2000). According to Ferguson (1976) normal

distributions have coefficients of skewness equal to 0. Skewness that differs from 0 indicates a non-normal distribution. Using SPSS, non-normalized and normalized scores using Blom's Formula (1958) for multivariate normality was computed for each variable and includes the following scores:

Table 2. Normality Transformations Using Blom's Formula

	Skewness	Blom's	Skewness	Blom's
	T1	T1	T2	T2
<hr/>				
CTSS				
1. Physical Aggression	.691	.462	2.109	1.241
2. Emotional Aggression	.574	.233	1.185	.673
Provision of Social Relationships				
1. Quality of Friend	-.805	-.203	NA	NA
2. Quality of Family	-1.567	-.543		
CBCL				
1. Externalizing	1.498	.086	1.288	.142
2. Internalizing	1.648	.120	1.420	.121

Descriptive statistics were conducted including the ranges, means, standard deviations and t-test, and are reported in table 4.

A total of 6 models were tested to confirm or disprove the current study's four hypotheses, path analysis using Analysis of Moment Structures (AMOS 18.0) with maximum likelihood estimation was conducted to evaluate the fit of the proposed models. Path analysis was the appropriate analytic strategy to explore model fit of a complex models, guided by systemic family development model for the sample population because it takes measurement error into consideration while fitting the model, and simultaneously examines the linear relationships among observed variables in the proposed model (Byrne, 2009).

Models for internalizing and externalizing behaviors were tested separately.

A test of the moderating effects of gender on the impact of parent aggression on youth behavioral outcomes was included. Multiple group analysis was performed by first creating a model with parameters constrained to be equal across the two groups (girls and boys). A baseline model was constructed that allowed all structural parameters to vary across groups. Model fit was determined by using the Chi-square statistic as well as other fit indices including: (a) comparative fit index (CFI), (b) goodness-of-fit index (GFI), and (c) root-mean-square error of approximation (RMSEA). A non-significant Chi-square value, CFI and GFI values above .90 (Hu & Bentler, 1999), and an RMSEA value of .05 or below (Arbuckle, 2006) indicate good model fit, although values up to .08 are considered reasonable fit (Browne & Cudek, 1993).

As per Hypothesis 4, potential mediating variables between parental aggression and the outcome measures of internalizing and externalizing behaviors were explored. In the event of evidence of mediational effects, bootstrapping procedures were used to examine the strength of the indirect effects (Preacher, Rucker, & Hayes, 2007; Baron & Kenny, 1986).

To examine if the pathways were similar or different by gender, the variant and invariant models were compared. If the pathways were different between groups, specific structural parameters were explored. Parameters were identified to be different when the critical ratio of difference was greater than 1.96 ($p < .05$).

Chapter 7: Results

Sample Description

The analysis sample is evenly split between girls (283) and boys (284). In T1, youth were between the ages of 11.4 and 12.8 and in T2 the youth were between 13.10 and 15.1 years old. In terms of any gender differences in demographics, independent samples T-tests were run for all demographic variables with gender as the grouping variable. Means and standard deviations can be found on Table 2. There were no significant differences in demographic characteristics. Ethnicity in the sample was primarily Hispanic with 49% (139) of girls and 48% (136) of boys; the next largest ethnicity being African American with 36% (101) of girls and 36% (103) of boys; and finally there were 12% (34) Caucasian girls and 13% (38) Caucasian boys. The remainder of the sample consisted of youth from Asian, Native American, and mixed race decent (3%). The majority of both girls and boys in this sample came from married, biological parents (57% of girls and 54% of boys), and a large majority considered their primary caregiver to be their mother (83% of girls and 79%) of boys.

Table 3. Demographics

Sample Size n=567	Girls =283	Boys = 284
	Girls	Boys
Mean Age (StD) youth		
Time 1	12.1(.33)	12.1(.31)
Time 2	14.2(.62)	14.1(.56)
Ethnicity youth (%)		
Hispanic	139(49%)	136(48%)
African American	101(36%)	103(36%)
White	34(12%)	38(13%)

*Other	9(3%)	7(2%)
Marital Status primary caregiver		
Married	160(57%)	152(54%)
Single	89(31%)	99(35%)
Partnered	32(11%)	32(11%)
Family Size –mean (StD)	5.45(1.94)	5.42(2.13)
Relationship to subject (PC)		
Mother, bio	236(83%)	223(79%)
Father, bio	21(7%)	37(13%)
Stepmother	1(.4%)	3(1%)
Grandparent	15(5%)	12(4%)
Aunt	3(1%)	2(1%)
Foster/Adopt/Other	7(2%)	6(2%)
Poverty Status		
NO	207(73%)	203(72%)
YES	76(27%)	81 (29%)
NC SES		
Low	117 (41%)	108(38%)
Medium	105(37%)	130(46%)
High	61(22%)	46(16%)
Education level, PC		
Less than high school	66(24%)	73(26%)
Some to finish high school	98(34%)	95(33%)
More than high school	88(31%)	80(28%)
Bachelor's degree or more	24(9%)	26(9%)
*2% missing data for girls and 3.5 % missing data for boys		

*Ethnicity other category includes those of Asian, Native American, and mixed race decent.
Poverty Status based on receiving Public Assistance or not.

Descriptive statistics for variables of interest in the current study are presented in

Table 3.

Table 4. Means, Standard Deviations, and T-Tests for Variables Used in the Analyses, By Gender

Variables	M	SD	Range (Raw scores)	t
Physical Aggression T1				
Girls	1.37	1.34	0-5	-1.661
Boys	1.56	1.41	0-6	
Emotional Aggression T1				-1.904
Girls	2.20	1.63	0-6	
Boys	2.12	1.62	0-6	
Internalizing at T1				
Girls	8.13	6.80	0-46	.56
Boys	7.93	6.90	0-40	
Externalizing at T1				-2.254*
Girls	10.1	8.25	0-59	
Boys	11.4	8.70	0-55	
Physical Aggression T2				
Girls	.56	.96	0-4	-.423

Variables	M	SD	Range	t
			(Raw scores)	
Boys	.60	1.04	0-6	
Emotional Aggression T2				-1.168
Girls	1.2	1.54	0-6	
Boys	1.3	1.5	0-6	
Internalizing at T2				
Girls	9.46	8.02	0-42	.319
Boys	9.10	7.30	0-41	
Externalizing at T2				
Girls	7.58	6.84	0-34	-1.81
Boys	8.34	6.85	0-39	
Qual Rel-Friends				
Girls	2.5	.37	1.17-3.0	3.0**
Boys	2.4	.40	1.14-3.0	
Qual Rel-Fam				.095
Girls	2.8	.27	1-2.29	
Boys	2.7	.30	1-2.86	

* $p < .05$, ** $p < .01$

Scores for girls and boys were similar for all variables except for the level of externalizing behaviors at T1 ($p = .025$), and the quality of relationships with friends ($p = .00$). Boys at 12 had significantly higher externalizing scores than girls, which is consistent with past literature (Galambos et al., 2009; McGee, Wolfe, & Wilson, 1997). The other significant gender difference was found in the quality of relationships with friends, where young adolescent girls reported significantly higher relationships, which is also consistent with past literature (Crick et al., 2002; Zahn-Waxler, Crick, Shirtcliff, & Woods, 2006).

The intensity of parent aggression scores from T1 is described in Table 4. The mean scores indicate a relatively low level of parent aggression, with 1 indicating one occurrence and 2 indicating two occurrences within the previous six months. Although this study is primarily interested in the prevalence of parent aggression and not the intensity of parent aggression, it is important to understand that within this population, the mean intensity of parent aggression does not exceed 1.80, which is attributed to the number of times a caregiver threatened to hit or throw something at the subject. The intensity of aggression was only measured at T1 in the original study and is presented here as a way of understanding where this sample population fits on the continuum of discipline to adolescent abuse. Primary caregivers in the current study reported relatively few instances of aggression toward their adolescents with the most common acts being threatening to hit or throw something at their adolescent, insulting and swearing at their youth, pushing and grabbing, and slapping their 12 year old. The least likely behavior that primary caregivers reported was beating the subject up.

Table 5. Parent Aggression

	Minimum	Maximum	Mean	Std. Deviation
# times insulted/swore at subject	0	6	1.50	1.758
# times stomped out of room	0	6	.56	1.261
# times cried	0	6	.93	1.525
# times said/did something to spite	0	6	.67	1.201
# times threatened to hit/throw something	0	6	1.80	1.938
# times thrown/kicked something	0	6	.36	.997
# times thrown something at subject	0	6	.35	.939
# times pushed/grabbed subject	0	6	1.12	1.527
# times slapped subject	0	6	1.07	1.455
# times hit subject with something	0	6	.90	1.466
# times beat subject up	0	6	.10	.533
# times Kicked/bit/hit (fist)	0	4	.05	.344
# times burnt/scalded	0	2	.01	.168

Correlations among variables appear in Table 6. Correlations were run for girls and boys separately and revealed several significant associations. First, parental physical and emotional aggression at T1 and T2 tended to co-occur for both girls ($r = .61, p < .01$) and boys ($r = .57, p < .01$). Second, parent physical aggression and internalizing behaviors at T1 also correlated positively for girls and boys ($r = .32, p < .01$; $r = .37, p < .01$ respectively) as did the relationship between parental emotional aggression and internalizing behaviors (girls: $r = .28, p < .01$; boys: $r = .30, p < .01$). Externalizing behaviors and physical aggression co-occurred at T1 (girls: $r = .44, p < .01$; boys: $r = .50, p < .01$), as did externalizing behaviors and emotional aggression for girls and boys ($r = .48, p < .01$; $r = .37, p < .01$ respectively). At T2, the relationship between parental physical aggression and internalizing behaviors co-occurred for girls ($r = .28, p < .01$) and boys ($r = .29, p < .01$), as did the relationship between T2 parent emotional aggression and T2 internalizing behaviors (girls: $r = .29, p < .01$; boys: $r = .39, p < .01$). T2 physical aggression co-occurred with externalizing behaviors at T2 for girls and boys ($r = .42, p < .01$; $r = .42, p < .01$ respectively). Both girls and boys demonstrated significant negative correlations between the quality of friendships and internalizing behaviors (girls: $r = -.21, p = .01$; boys: $r = -.12, p = .05$) and externalizing behaviors (girls: $r = -.14, p = .05$; boys: $r = -.17, p = .01$) at T1. There was a strong positive correlation between internalizing behaviors at T1 and T2 for girls and boys (girls: $r = .53, p < .01$; boys: $r = .54, p < .01$). Externalizing behaviors at T1 and T2 also co-occurred (girls: $r = .62, p < .01$; boys: $r = .63, p < .01$).

Gender differences appeared in the following relationships: 1. there was a negative correlation between parental physical aggression at T1 and the quality of friendships for girls but not boys ($r = -.15, p < .05$; $r = -.1, p = ns$ respectively); 2. the relationship between T1 quality

of relationships with family and T1 internalizing and externalizing behaviors was negatively correlated for boys but not for girls (internalizing, boys: $r = -.12$, $p = .05$; girls: $r = -.10$, $p = ns$, and externalizing, boys: $r = -.14$, $p = .05$; girls: $r = -.08$, $p = ns$). Boys experienced a negative correlation between the quality of family relationships at T1 and internalizing behaviors at T1 ($r = -.14$, $p < .05$) but the co-occurrence was not significant for girls.

The developmental analysis that was performed included controlling for ethnicity, poverty status, and marital status during the initial point in time. Similar associations were found for the co-occurrence of externalizing at T2 and ethnicity, externalizing at T1 and marital status, and parent aggression at T2 and poverty for both girls and boys. Overall, the correlations were in the hypothesized direction.

Table 6. Bivariate Correlations for All Study Variables using Blom's Formula to Normalize Data.

	1	2	3	4	5	6	7	8	9	10
1. Phys Aggress T1	1	.609**	.425**	.335**	-.146*	.013	.316	.442**	.275**	.362**
2. Emot Aggress T1	.574**	1	.338**	.445**	-.077	-.033	.277**	.481**	.277**	.392**
3. Phys Aggress T2	.306**	.194**	1	.552**	-.045	.042	.191**	.313**	.279**	.418**
4. Emot Aggress T2	.300**	.394**	.549**	1	-.037	.000	.205	.320**	.291**	.411**
5. Quality of Friends	-.077	-.086	.022	-.033	1	.316**	-.209**	-.135*	-.165**	-.104
6. Quality of Family	-.065	.073	.096	.023	.322**	1	-.102	-.082	-.113	-.029
7. Intern	.366**	.296**	.148*	.220**	-.117*	-.199**	1	.628**	.525**	.379**

8. Extern	.492**	.370**	.270**	.334**	-.173**	-.140*	.537**	1	.428**	.620**
9. Intern T2	.241**	.212**	.291**	.385**	-.002	-.136*	.541**	.392**	1	.644**
10. Extern T2	.318**	.282**	.422**	.496**	-.091	-.074	.327**	.625**	.625**	1

Note: Girls are above the diagonal, boys are below the diagonal. * $p < .05$. ** $p < .01$

Co-Occurrence of Parent Aggression and Maladaptive Behaviors.

Hypothesis 1 states that parental physical and emotional aggression is consistently associated with youth externalizing and internalizing behaviors during early and middle adolescence. To address this hypothesis, four path models were tested (see models 1-4) examining the relationships at T1 and T2 separately to test for co-occurrence, and then combining T1 and T2 to test stability of constructs over time and temporal relationships between variables to lend a stronger argument toward causality.

Model 1.

Time 1, effects of parent aggression on quality of relationships with friends and family and the outcome of externalizing behaviors. To begin to test the model in indicated in Figure 1 on page 44, separate analysis was run for T1 and T2. At T1, both the constrained and unconstrained models were run simultaneously. In the constrained model all structural pathways were constrained to be equal for girls and boys and in the unconstrained model all pathways were allowed to differ for girls and boys. The Chi-square for the constrained model was $\chi^2(8, N = 567) = 9.632, p = .292$ and the chi-square for the unconstrained model could not be run because all the possible relationships were allowed in the model, therefore a probability level could not be calculated. Since the constrained model indicated that girls

and boys are similar, data from the full sample was used using the constrained model for analysis. Please see Figure 2.

After allowing the error terms for the quality of relationships with friends and family for the whole sample to covary, as indicated as necessary due to an initial poor model fit, goodness of fit indices indicated a an excellent fit between the proposed model and the data (Byrne, 2009): Comparative Fit Index (CFI) = 1, The Goodness of Fit index (GFI) = 1, and the Root Mean Square Error of Approximation (RMSEA) = .019

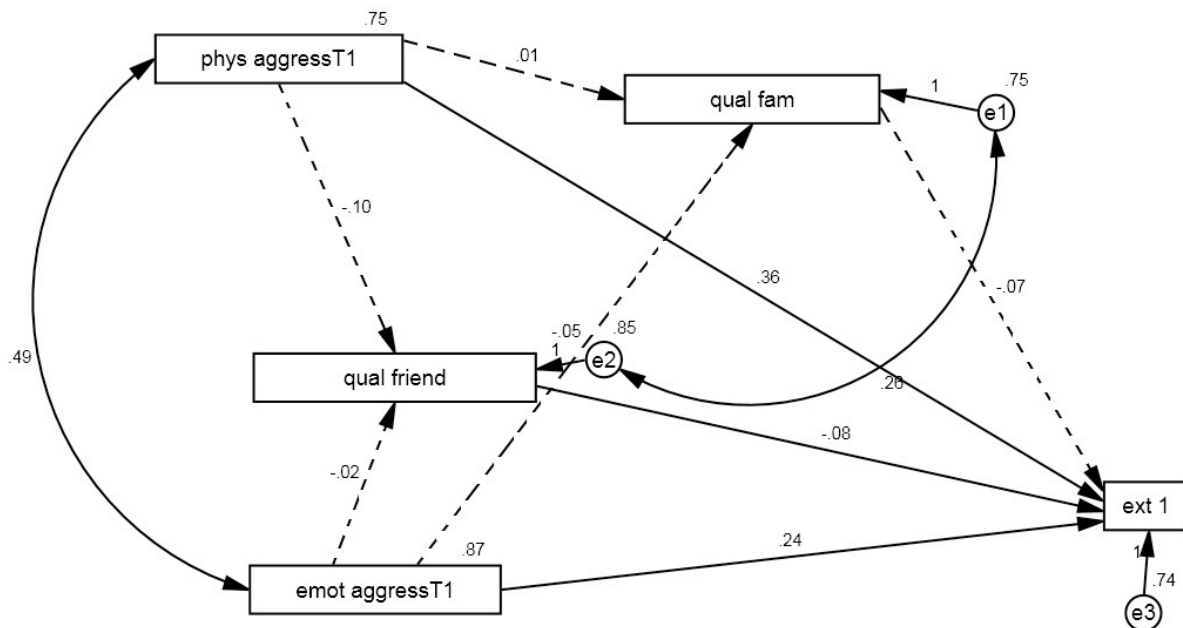


Figure 2. Girls and Boys at T1 with Externalizing Behaviors

Table 7. Regression Weights for Girls and Boys, Constrained

		Estimate	S.E.	C.R.	P
Quality Family Relations	<--- Physical Aggression T1	.008	.053	.154	.878

			Estimate	S.E.	C.R.	P
Quality Friendships		Physical Aggression T1	-.104	.056	-1.878	.060
Quality Family Relations	<---	Emotional Aggression T1	-.055	.050	-1.088	.277
Quality Family Relations		Emotional Aggression T1	-.024	.053	-.459	.646
Externalizing T1	<---	Quality Friendships	-.083	.039	-2.107	.035
Externalizing T1	<---	Quality Family Relations	-.071	.042	-1.713	.087
Externalizing T1	<---	Physical Aggression T1	.360	.050	7.266	.000
Externalizing T1		Emotional Aggression T1	.237	.047	4.993	.000
Externalizing	<---	Poverty status	.148	.086	1.723	.085
Externalizing	<---	Ethnicity of Subject	.036	.044	.799	.424
Externalizing	<---	Marital Status	.122	.056	2.192	.028

Significance = $p < .05$

Shaded areas indicate control variables

Regression weights for the constrained model indicated three significant negative relationships: 1. the quality of relationships with friends and externalizing behaviors ($\beta = -.1$, $SE = .039$, $p = .04$); 2. parental physical aggression and reports of externalizing behaviors ($\beta = .36$, $SE = .050$, $p = .000$); and 3. parental emotional aggression and externalizing behaviors ($\beta = .24$, $SE = .047$, $p = .000$).

According to Gaskin (2012), control variables should covary w/exogenous variables to test the relationship between the covariance and the endogenous variable. Results indicated that poverty and ethnicity were not significantly related to externalizing behaviors.

When controlling for the covariate, marital status on externalizing behaviors, while it was significant ($p = .05$), there was no change in the impact of parent aggression on externalizing behaviors. See Table 7.

Mediation at time 1 with externalizing behaviors. Hypothesis 4 states that the quality of relationships with friends and/or family mediates the effect of parent aggression on behavioral outcomes for both boys and girls at T1. In order for mediation to exist three significant paths need to exist. 1. The first being the path between the independent variable to the dependent variable (specific forms of parent aggression to youth behavioral outcomes); 2. The second between the dependent variable to the mediating variable (specific forms of parent aggression to the quality of relationships with friends); and 3. The third pathway being the mediator to the independent variable (the quality of relationships with friends to youth behavioral outcomes; Preacher, Rucker, & Hayes, 2007). In this sample the relationship between both forms of parent aggression were not significantly associated with either mediating variable, and therefore no evidence for mediation exist.

Model 2.

Time 1, effects of parent aggression on the quality of relationships with friends and family and the outcome of internalizing behaviors. In exploring the model at T1 with internalizing behaviors, both the constrained and unconstrained models were run simultaneously. In the constrained model all structural pathways were constrained to be similar for girls and boys and in the unconstrained model all pathways were allowed to differ for girls and boys. The Chi-square for the constrained model was $\chi^2(8, N = 567) = 6.288, p = .615$ and the chi-square for the unconstrained model could not be run because all the

possible relationships were allowed in the model, therefore a probability level could not be calculated. Since the constrained model indicated that girls and boys are similar, data from the full sample was used using the constrained model for analysis. Therefore it was concluded that there are no gender differences concerning these connections, and reported results are based on analysis in which all path coefficients and error variances are equal for girls and boys.

After allowing the error terms of the quality of friends and family for the whole sample to covary as indicated as necessary due to an initial poor model fit, goodness of fit indices indicated a an excellent fit between the proposed model and the data (Byrne, 2009): Comparative Fit Index (CFI) = 1, The Goodness of Fit index (GFI) = .996, and the Root Mean Square Error of Approximation (RMSEA)= .000.

When control variables were introduced as covariants of parent aggression on internalizing behaviors, poverty and marital status were not significant. Ethnicity as a covariant was significant ($p = .004$) but the impact of parent aggression on internalizing behaviors did not change.

Significant relationships included 1. the reports of the quality of relationships with friends and internalizing behaviors ($\beta = -.1$, $SE = .042$, $p = .032$); and 2. the reports of the quality of relationships with family and internalizing behaviors ($\beta = -.12$, $SE = .045$, $p = .007$); 3. the relationships between parent physical aggression and internalizing behaviors ($\beta = .3$, $SE = .053$, $p = .000$); and 4. the effect of parental emotional aggression on internalizing behaviors ($\beta = .13$, $SE = .051$, $p = .011$). There is no evidence to explore mediation at T1 with internalizing

behaviors as the necessary relationships to measure indirect effects are not significant.

Please see Figure 3.

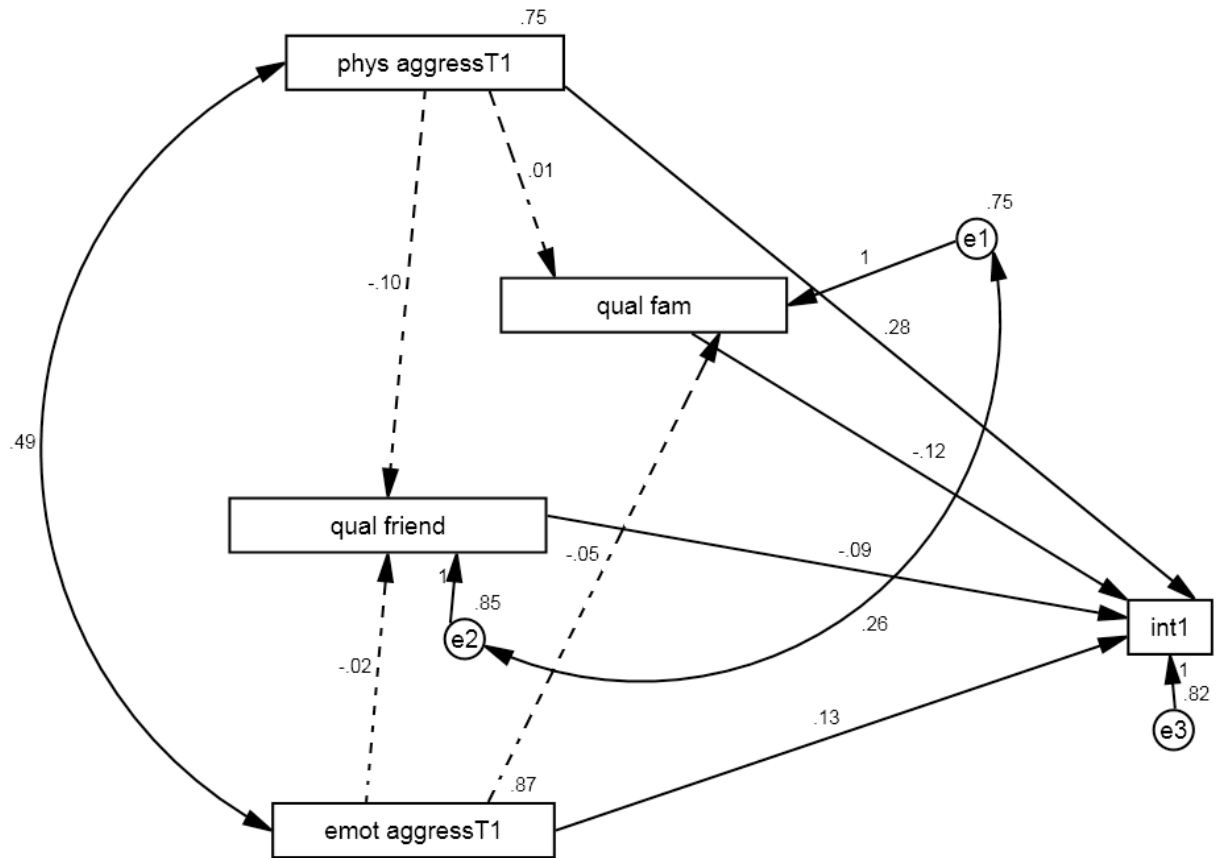


Figure 3. Girls and Boys at T1 with Internalizing Behaviors

Table 8. Regression Weights: Girls and Boys (Constrained)

			Estimate	S.E.	C.R.	P
Quality Family Relations	<---	Physical Aggression T1	.008	.053	.154	.878
Quality Family Relations	<---	Emotional Aggression T1	-.055	.050	-1.088	.277
Quality Friendships	<---	Physical Aggression T1	-.104	.056	-1.878	.060
Quality Friendships		Emotional Aggression T1	-.024	.053	-.459	.646

			Estimate	S.E.	C.R.	P
Internalizing	<---	Quality Friendships	-.091	.042	-2.114	.032
Internalizing	<---	Quality Family Relations	-.121	.045	-2.705	.007
Internalizing		Emotional Aggression T1	.129	.051	2.528	.011
Internalizing		Physical Aggression T1	.285	.053	5.351	.000
Internalizing	<---	Poverty Status	-.053	.092	-.575	.565
Internalizing	<---	Ethnicity of Subject	-.136	.048	-2.887	.004
Internalizing	<---	Marital Status	.105	.060	1.744	.081

Significance = $p < .05$

Shaded areas indicate control variables

Model 3.

Time 2, effects of parent aggression on quality of relationships with friends and family and the outcomes of externalizing behaviors. To test the model indicated in Figure 1 on page 37, both constrained and unconstrained models were run simultaneously. In the constrained model all the pathways were constrained to be equal for girls and boys. In the unconstrained model all pathways were permitted to vary for girls and boys. The chi-square for the constrained model was $\chi^2(12, N= 567)= 7.652, p= .812$, and the chi-square for the unconstrained model was $\chi^2(8, N= 567)= 5.352, p= .719$. Chi-square equivalence was tested between the constrained and unconstrained models such that $\chi^2 \Delta = \chi^2(12, N= 567)= 7.652 - \chi^2(8, N= 567)= 5.352$. The resulting value of 2.3 (4, $N= 567$) was not significant at $p < .05$ ($p = .681$), indicating that there is not a significant difference between the models for girls and boys.

Using the constrained model at T2, other fit indices indicated excellent model fit. The CFI 1, the GFI was .996, and the RMSEA was .000. The only significant relationships at T2 with externalizing behaviors were found between the reports of parental physical aggression at T2 and externalizing behaviors at T2 ($\beta = .31$, $SE = .055$, $p = .000$), and the reports of parental emotional aggression and externalizing behaviors ($\beta = .36$, $SE = .049$, $p = .000$). Please see Figure 4.

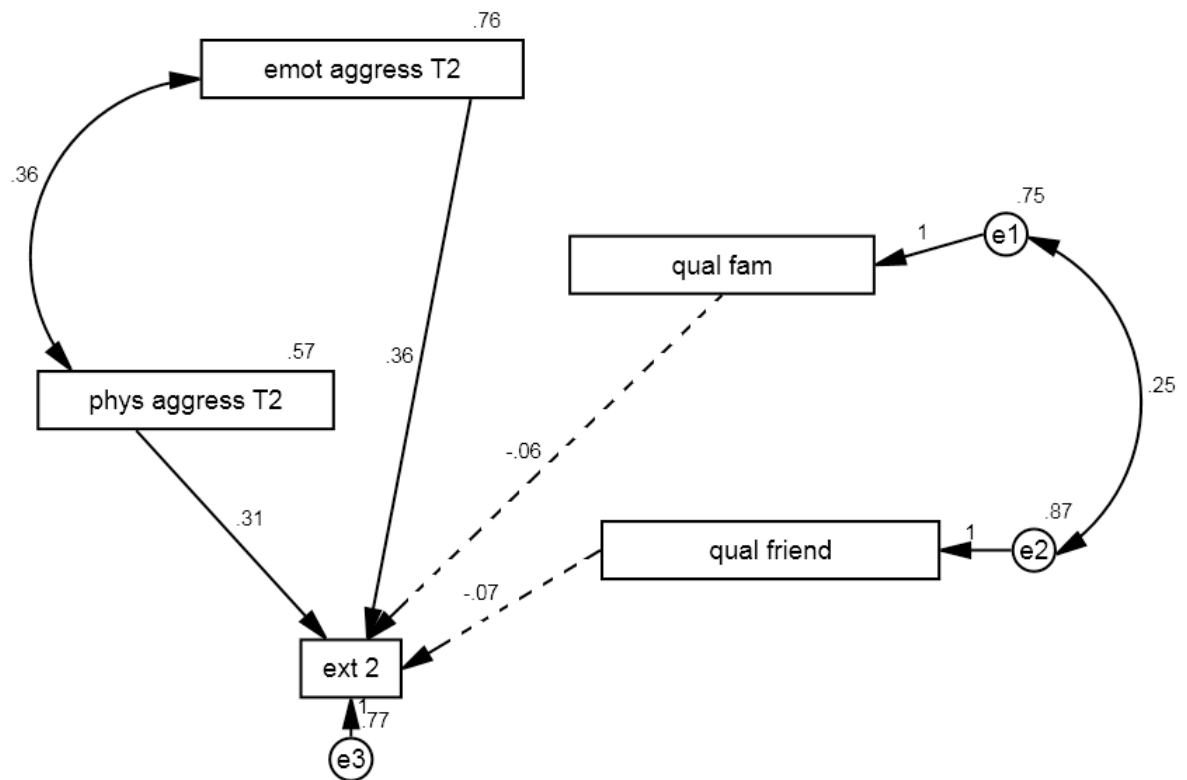


Figure 4. Girls and Boys at T2 with Externalizing Behaviors, Constrained Model

Table 9. Regression Weights: (Girls and Boys - Constrained)

			Estimate	S.E.	C.R.	P
Externalizing T2	<---	Quality Family Relations	-.059	.041	-1.430	.153

			Estimate	S.E.	C.R.	P
Externalizing T2	<---	Quality Friendships	-.068	.039	-1.749	.080
Externalizing T2	<---	Emotional Aggression T2	.361	.049	7.307	.000
Externalizing T2	<--	Physical Aggression T2	.314	.055	5.738	.000

Significance = $p < .05$

Model 4.

Time 2, effect of parent aggression on quality of relationships with friends and family and the outcome of internalizing behaviors. At T2, the chi-square for the constrained model was $\chi^2(12, N=567)=12.408$ $p=.414$, and the chi-square for the unconstrained model was $\chi^2(8, N=567)=5.352$, $p=.719$. Chi-square equivalence was tested between the constrained and unconstrained models such that $\chi^2 \Delta = \chi^2(12, N=567)=12.408 - \chi^2(8, N=567)=5.352$. The resulting value of $7.056(4, N=567)$ was not significant at $p < .05$ ($p=.133$), indicating that there is not a significant difference between the models for girls and boys. Other fit indices indicated excellent model fit with a CFI of 1, GFI of .996, and the RMSEA of .008.

Regression weights identified in Table 12 shows three significant paths at T2, 1. The relationship between the quality of relationships with family and internalizing behaviors ($\beta = -.14$, $SE = .045$, $p = .001$); 2. the relationship between parent physical aggression at T2 and internalizing behaviors at T2 ($\beta = .2$, $SE = .088$, $p = .001$) and 3. the pathway between parental emotional aggression and internalizing behaviors ($\beta = .3$, $SE = .053$, $p = .004$). The remaining pathway is not significant, see Table 10.

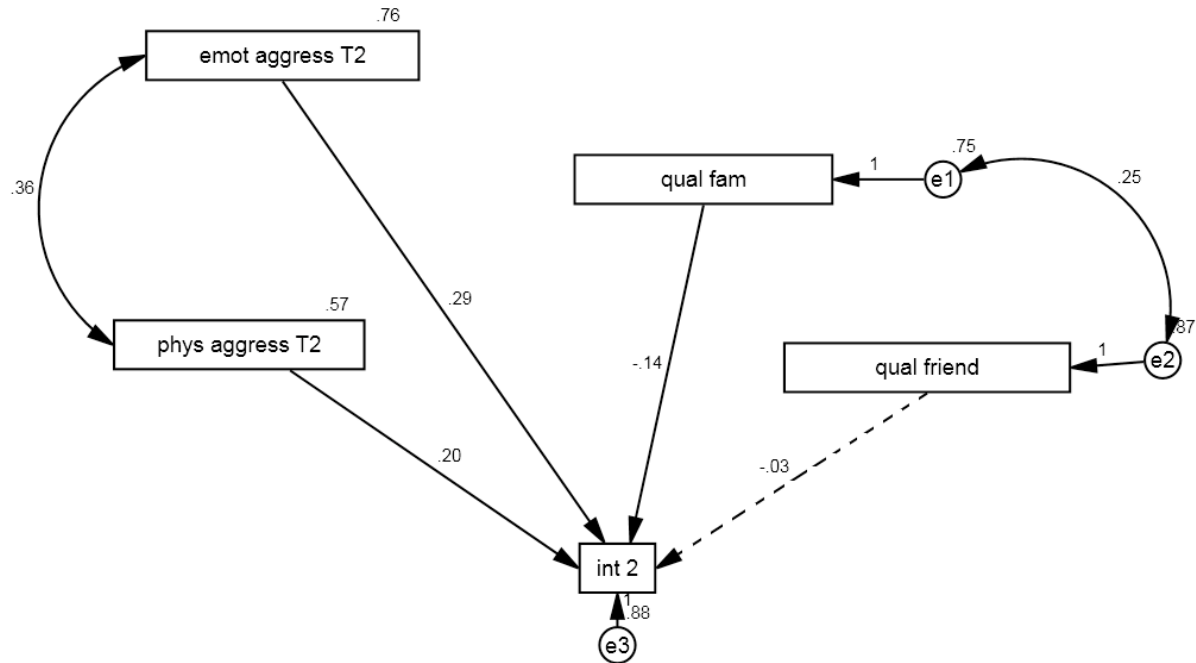


Figure 5. Girls and Boys at T2 with Internalizing Behaviors

Table 10. Regression Weights, Girls and Boys (Constrained)

			Estimate	S.E.	C.R.	P
Internalizing T2	<---	Quality Family Relations	-.143	.045	-3.211	.001
Internalizing T2	<---	Quality Friendships	-.026	.042	-.618	.537
Internalizing T2	<---	Physical Aggression T2	.196	.059	3.320	.000
Internalizing T2	<---	Emotional Aggression T2	.293	.053	5.498	.004

Notes: *** p-value < 0.01; ** p-value < 0.000***

Model 5.

Stability of parent aggression, externalizing and internalizing behaviors. Hypothesis 2 states that parent aggression as well as externalizing and internalizing behaviors will be

stable over time. It was expected that these relationships apply to girls and boys. Models 5 and 6 test this hypothesis.

Effects of youth externalizing and internalizing behaviors on parent aggression.

Hypothesis 3 states that parental physical and emotional aggression in early adolescence predicts youth externalizing and internalizing behaviors in middle adolescence, and youth externalizing and internalizing behaviors in early adolescence predict parent aggression in middle adolescence. It is hypothesized that these associations hold for girls and boys. Please see models 5 and 6.

Time 1 & 2, full model demonstrating stability of constructs and systemic relationships between variables in time 1 and time 2 and externalizing behaviors. At T2, the chi-square for the constrained model was $\chi^2(27, N= 567)= 23.420$ $p= .662$, and the chi-square for the unconstrained model was $\chi^2(8, N= 567)= 7.203$, $p= .515$. Chi-square equivalence was tested between the constrained and unconstrained models such that $\chi^2 \Delta = \chi^2(27, N= 567)= 23.420 - \chi^2(8, N= 567)= 7.203$. The resulting value of 16.217 (19, N= 567) was not significant at $p < .05$ ($p = .643$), indicating that there is not a significant difference between the models for girls and boys. Other fit indices include, the CFI = 1, GFI = .997, RMSEA = .000 indicating an excellent fit of the model to the data (see Figure 6).

Significant relationships included: 1. the effects of the reports of the quality of friendships on externalizing behaviors ($\beta= -.1$, $SE= .039$, $p = .035$); 2. the reports of parental physical aggression at T1 on externalizing behaviors T1 ($\beta= .36$, $SE= .050$, $p= .000$), meaning the higher the parental physical aggression, the higher the externalizing behaviors; 3. the reports of parental emotional aggression at T1 on externalizing behaviors T1 ($\beta= .24$, $SE=$

.047, $p = .000$), meaning the higher the parental emotional aggression, the higher the externalizing behaviors; 4. externalizing behaviors at T1 on parental physical aggression at T2 ($\beta = .1$, $SE = .033$, $p = .000$); 5. externalizing behaviors at T1 on parental emotional aggression at T2 ($\beta = .15$, $SE = .038$, $p = .000$); 6. parental physical aggression at T1 on parental physical aggression at T2 ($\beta = .3$, $SE = .063$, $p = .000$); 7. parental emotional aggression at T1 on Parental emotional aggression at T2 ($\beta = .4$, $SE = .067$, $p = .000$); 8. externalizing at T1 on externalizing behaviors at T2 ($\beta = .5$, $SE = .036$, $p = .000$); 9. parental physical aggression at T2 on externalizing at T2 ($\beta = .22$, $SE = .048$, $p = .000$); 10. parental emotional aggression at T2 on externalizing behaviors at T2 ($\beta = .23$, $SE = .044$, $p = .000$).

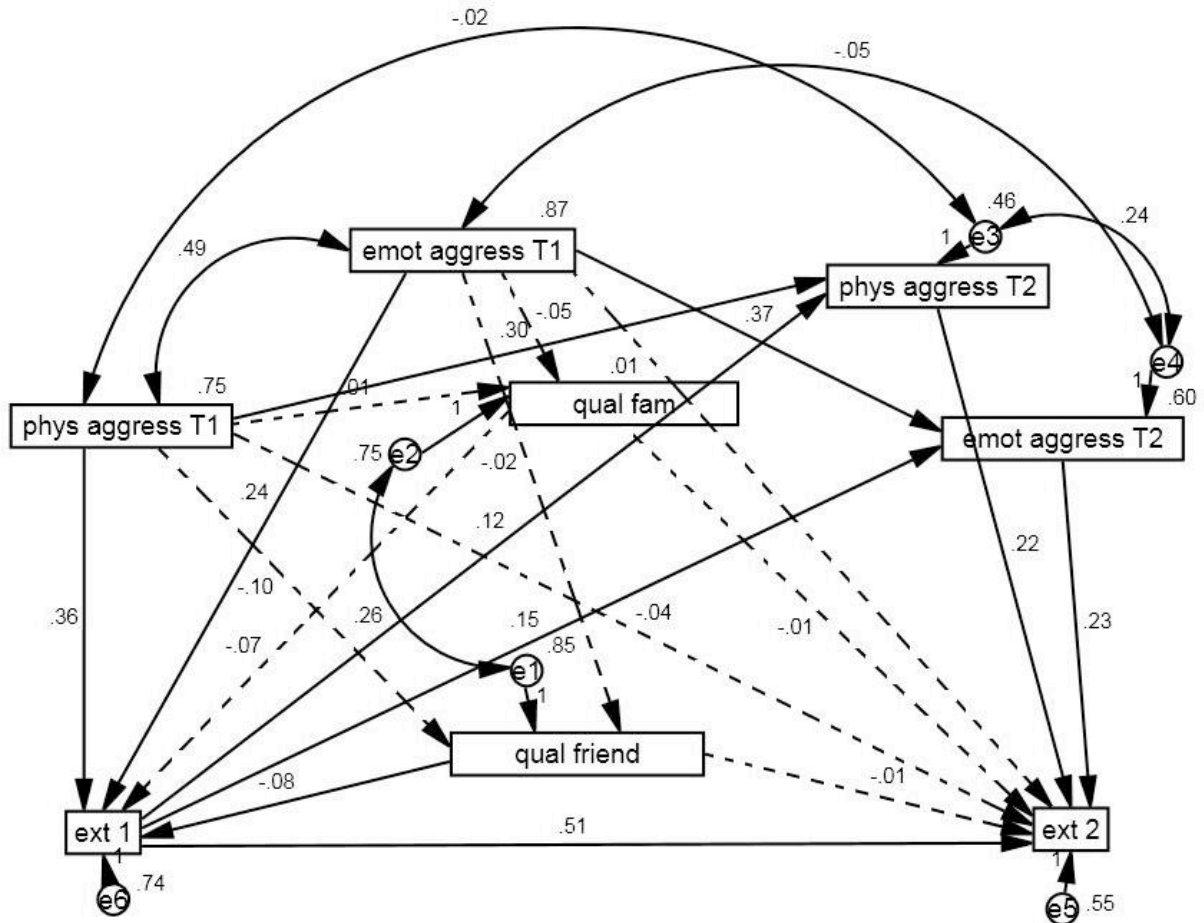


Figure 6. Girls and Boys at T1 and T2 with Externalizing Behaviors

Table 11. Regression Weights, Girls and Boys (Constrained)

			Estimate	S.E.	C.R.	P
Quality Friendships	<---	Physical Aggression T1	-.104	.056	-1.878	.060
Quality Friendships	<---	Emotional Aggression T1	-.024	.053	-.460	.646
Quality Family Relations	<---	Physical Aggression T1	.008	.053	.154	.878
Quality Family Relations	<---	Emotional Aggression T1	-.055	.050	-1.089	.276
Externalizing T1	<---	Quality Friendships	-.083	.039	-2.107	.035
Externalizing T1	<---	Quality Family Relations	-.071	.042	-1.713	.087

			Estimate	S.E.	C.R.	P
Externalizing T1	<---	Physical Aggression T1	.360	.050	7.266	***
Externalizing T1	<---	Emotion Aggression T1	.237	.047	5.000	***
Physical Aggression T2	<---	Externalizing T1	.117	.035	3.349	***
Emotional Aggression T2	<---	Externalizing T1	.147	.038	3.899	***
Physical Aggression T2	<---	Physical Aggression T1	.304	.063	4.800	***
Emotional Aggression T2	<---	Emotion Aggression T1	.374	.067	5.598	***
Externalizing T2	<---	Externalizing T1	.514	.036	14.385	***
Externalizing T2	<---	Quality Friendships	-.009	.033	-.271	.786
Externalizing T2	<---	Quality Family Relations	-.008	.035	-.234	.815
Externalizing T2	<---	Physical Aggression T1	-.037	.044	-.843	.399
Externalizing T2	<---	Physical Aggression T2	.216	.048	4.526	***
Externalizing T2	<---	Emotional Aggression T2	.228	.044	5.132	***
Externalizing T2	<---	Emotional Aggression T1	.006	.042	.136	.892

Significance = $p < .05$

Model 6.

Time 1 & 2, full model demonstrating stability of constructs and systemic relationships between variables in time 1 and time 2 and internalizing behaviors. At T2 for the model with internalizing behaviors, the chi-square for the constrained model was $\chi^2(27, N= 567)= 22.116$ $p= .731$ and the chi-square for the unconstrained model was $\chi^2(8, N= 567)= 6.119$, $p= .634$. Chi-square equivalence was tested between the constrained and unconstrained models such that $\chi^2 \Delta = \chi^2(27, N= 567)= 22.116- \chi^2(8, N= 567)= 6.119$. The resulting value of 15.997 (19, N=

567) was not significant at $p < .05$ ($p = .657$), indicating that there is not a significant difference between the models for girls and boys. Other fit indices include, the CFI = .1, GFI = .997, RMSEA = .000 indicating an excellent fit of the model to the data (see figure 7).

The final model tested was the full model, T1 and T2 with internalizing behaviors. Significant parameters included: 1. the relationship between the quality of relationship with friends at T1 and internalizing behaviors ($\beta = -.1$, $SE = .042$, $p = .032$); 2. the quality of relationships with family and internalizing behaviors at T2 ($\beta = -.12$, $SE = .045$, $p = .007$); 3. parental physical aggression at T1 and internalizing behaviors at T1 ($\beta = .3$, $SE = .053$, $p = .000$); 4. parental emotional aggression at T1 and internalizing behaviors at T1 ($\beta = .13$, $SE = .049$, $p = .011$); 5. internalizing at T1 and parental emotional aggression at T2 ($\beta = .08$, $SE = .035$, $p = .034$); 6. the quality of relationships with family and internalizing behaviors T2 ($\beta = -.1$, $SE = .39$, $p = .049$); 7. parent physical aggression at T1 and T2 ($\beta = .380$, $SE = .060$, $p = .000$); 8. parental emotional aggression at T1 and T2 ($\beta = .45$, $SE = .064$, $p = .000$); 9. internalizing behaviors at T1 and parental emotional aggression at T2 ($\beta = .075$, $SE = .35$, $p = .034$); 10. the quality of relationships with family and internalizing behaviors at T2 ($\beta = -.077$, $SE = .039$, $p = .049$); and finally 11. the relationship between parental physical aggression at T2 and internalizing at T2 ($\beta = .15$, $SE = .052$, $p = .006$).

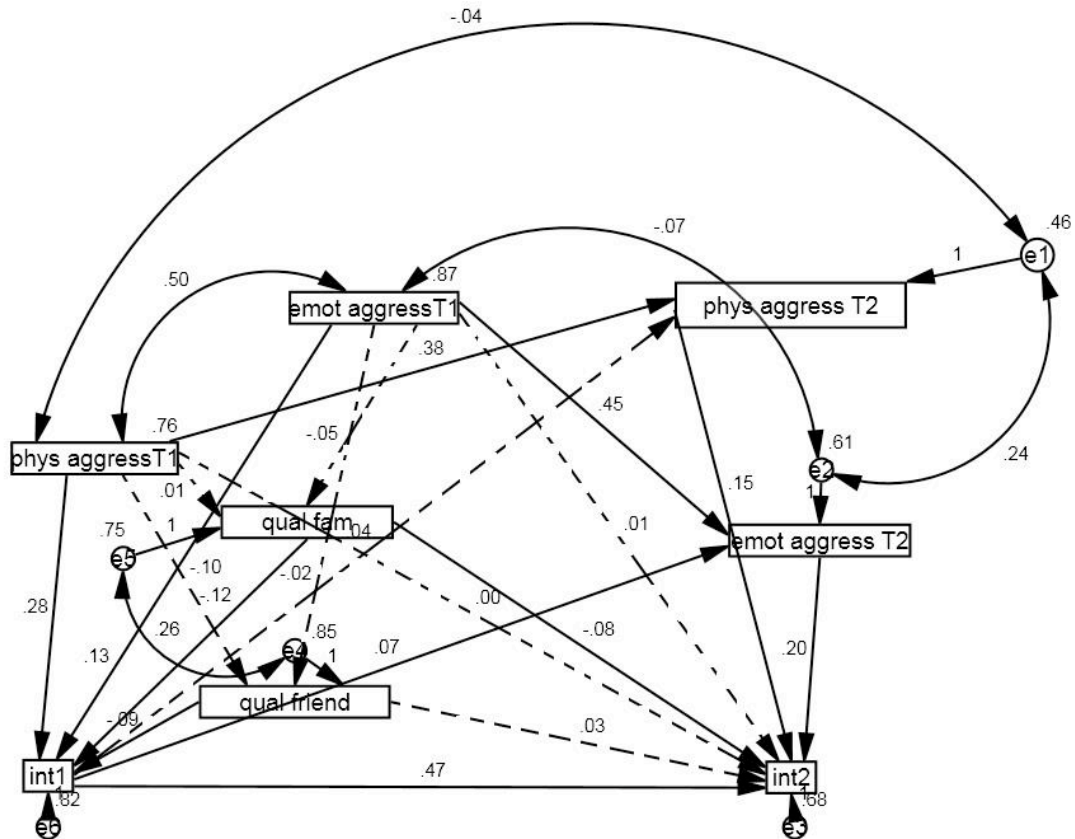


Figure 7. Girls' and Boys' Full Model with Internalizing Behaviors at T1 and T2

Table 12. Regression Weights: Girls and Boys (Constrained)

			Estimate	S.E.	C.R.	P
Quality Family Relations	<---	Physical Aggression T1	.008	.053	.154	.878
Quality Friendships	<---	Physical Aggression T1	-.104	.056	-1.878	.060
Quality Friendships	<---	Emotional Aggression T1	-.024	.050	-.460	.646
Quality Family Relations	<---	Emotional Aggression T1	-.055	.053	-1.089	.276
Internalizing T1	<---	Physical Aggression T1	.285	.053	5.351	***
Internalizing T1	<---	Quality Family Relations	-.121	.045	-2.705	.007
Internalizing T1	<---	Quality Friendships	-.091	.042	-2.141	.032

			Estimate	S.E.	C.R.	P
Internalizing T1	<---	Emotion Aggression T1	.129	.049	2.531	.011
Emotional Aggression T2	<---	Emotion Aggression T1	.453	.064	7.125	***
Emotional Aggression T2	<---	Internalizing T1	.075	.035	2.114	.034
Physical Aggression T2	<---	Internalizing T1	.035	.033	1.086	.278
Physical Aggression T2	<---	Physical Aggression T1	.380	.060	6.328	***
Internalizing T2	<---	Internalizing T1	.468	.037	12.689	***
Internalizing T2	<---	Emotion Aggression T2	.204	.050	4.108	***
Internalizing T2	<---	Quality Family Relations	-.077	.039	-1.971	.049
Internalizing T2	<---	Quality Friendships	.028	.037	.754	.451
Internalizing T2	<---	Physical Aggression T1	-.005	.049	-.097	.923
Internalizing T2	<---	Emotional Aggression T1	.005	.046	.109	.915
Internalizing T2	<---	Physical Aggression T2	.146	.052	2.734	.006

Significance = $p < .05$

Chapter 8: Discussion

Prior to a discussion of findings, a notable strength of the current analysis is that the large majority of youth and their families are Hispanic (approximately 50%) and African American (approximately 36%). The diversity of the sample population in this data set offered an opportunity to expand what is known about the links between parent aggression and youth maladaptive behaviors in primarily Hispanic and African American populations. It has been theorized that there is a perceived cultural norm of corporal punishment, which moderates the association between parent aggression in the form of corporal punishment, and negative youth behaviors (Deater-Deckard & Dodge, 1997; Gershoff, 2010; Simons et al, 2002), suggesting that youth evaluations of the parent discipline used impacts youth outcomes (Mulvaney & Mebert, 2010). While it was beyond the scope of this study, future research exploring the moderating effects of ethnicity on parent aggression and youth outcomes will provide more specificity about cultural differences.

This study centralizes the experiences of Hispanic and African American adolescents and their families. Findings suggest that there are associations between parent aggression and youth maladaptive behaviors, as well as negative patterns that continue from early to middle adolescence. The more that is understood about parent/adolescent behavioral patterns of diverse populations, the more effective and more culturally appropriate the resources and interventions can be.

The purpose of this study was to extend empirical literature on the effects of parental physical and emotional aggression on youth maladaptive behavior by examining the associations between both types of parental aggression, youth externalizing and

internalizing behaviors, and the quality of relationships with family and friends using longitudinal data from the Project on Human Development in Chicago Neighborhoods. There is a need to examine the effects of parent aggression on young and middle adolescents using a developmental and systemic approach (Lazsloffy, 2002) to identify patterns of behavior and inform family treatment efforts. This investigation suggests that even low levels of parental aggression have long-term negative emotional and behavioral effects on early and middle adolescents. Four central findings emerged from this investigation and will be organized to frame this discussion followed by treatment recommendations and study limitations.

First, parental emotional and physical aggression directed at adolescents, and adolescents' externalizing and internalizing behaviors are relatively stable from early to middle adolescence, suggesting negative patterns of parent and adolescent behaviors that co-occur. The relationship between parental physical aggression and externalizing behaviors decreases from T1 to T2, which is in line with studies that have found that corporal punishment decreases as youth move through adolescence. For example, Straus (2010) found that approximately 40% of 13 year olds experienced corporal punishment, and 13% of youth experienced CP at age 17. This is not the case for the relationship between parents' emotional aggression on youth externalizing behaviors. It was found that parental emotional aggression remained constant. Interestingly, the co-occurring parental emotional aggression and youth internalizing behaviors almost doubled from T1 to T2 (.13 to .2 respectively). While parents may be using less physical punishment with their teens, it

appears that their use of emotionally aggressive tactics increased for this sample population.

One of the benefits of path analysis is that all paths can be evaluated simultaneously while controlling for all other variables. This means that even while controlling for youth externalizing and internalizing behaviors, parents who use aggressive tactics, keep using those tactics throughout early and middle adolescence. This supports research that suggests that parent aggression is part of a broader parenting style, mainly authoritarian, that a parent continues to use throughout their adolescent's development (Simons et al., 1994). At a time when youth need a secure base, this investigation has shown that parents who used emotionally and physically aggressive tactics with their youth in early adolescence continued to do so in middle adolescence.

Understanding that parent (both emotional and physical) aggression is stable throughout early and middle adolescence lends explanation to the long term negative effects of parent aggression suggested by other developmental researchers (Briere & Rutz, 1988, 1990; Miller-Perrin, Perrin, & Kocur, 2009; Molnar, Berkman, & Burka, 2001; Straus & Kantor, 1994; Higgins & McCabe, 2000). Developmental tasks associated with adolescence include developing independence and identity separate from their parents and to establish closer ties with friends. Newman and Newman (2012) refer to the psychosocial crisis in early adolescence as group identity versus alienation (Erikson, 1968). Youth can accomplish stage salient tasks when they experience an environment of parental warmth and support (McCarty, Zimmerman, Digiuseppe, & Christakis 2005; White & Renk, 2012). The resulting self-confidence allows adolescents to form meaningful connections with supportive and pro-

social peers, leading to positive adaptation. Parent aggression appeared to impede youths' ability to adapt and left the youth vulnerable to resolving developmental tasks in a negative way, and specifically by experiencing internalizing behaviors, and /or externalizing behaviors. Adolescence is a critical time for youth to have the confidence to define themselves as separate from their parents, and to do so, a supportive base of parental approval optimizes wellbeing. Parent aggression appears to interrupt mastery of adolescent stage salient tasks.

Youth maladaptive behaviors (internalizing and externalizing behaviors), shown to be stable in this study, place the adolescent at risk for long-term negative consequences (Masten, Roisman, Long, Burt, Obredović, Riley, Boelccke-Stennes, & Tellegen, 2005). Results from this study indicated that youth who demonstrated externalizing behaviors or experienced internalizing behaviors in early adolescence were at high risk for continuing the maladaptive behaviors into middle adolescence, supporting a trajectory of negative behavioral outcomes for the adolescent. This indicates that without the coping skills established through positive resolution of developmental tasks, youth were left vulnerable for continued maladaptive behavior. According to Erikson (1959), failure to resolve earlier stage salient tasks often results in difficulty with later developmental tasks.

Using systemic family development theoretical framework, a negative pattern of parent-child behavior results from the inability to manage stress, leaving the family vulnerable to repeat negative interactions. Theoretically, when parents' transitions coincide with their adolescents, high levels of stress may be experienced. Parent aggression, whether it is the result of stress in the parental subsystem, is in and of itself a family stressor

that has been found to be associated with increased risk for maladaptive child outcomes (Ge, Conger, Lorenz, & Simons, 1994; Conger, Patterson, & Ge, 1995). SFD would explain this pattern of behavior as a dysfunctional way of coping that may have possibly reduced stress in a parent (by striking out, or yelling at their adolescent) but simultaneously caused continued stress in the family system. Positive adaptation is effected in both the parents and the adolescents. This results in what McCubbin and Patterson (1983) refer to as stressor pileup, which frames the continued negative behavior patterns as part of a cycle. As identified by Pelcovitz and colleagues (2000), parents who have difficulty in negotiating conflict with teens in a flexible, balanced manner, and those parents with high levels of rigidity, run the risk of using aggression toward their youth. Without adequate resources to support optimal parenting and interrupt parental physical and emotional aggression, the resulting stress impacts youth and parent behaviors. The stress at T1 is conceptualized as parental physical and emotional aggression toward the youth, eliciting a negative response from the youth, which then becomes a stressor that impacts parent behaviors at T2. A negative cycle of parent to youth and youth to parent behaviors continue from early to middle adolescence.

As a foundational component of SFD, Laszloffy (2002) proposes that stress is an ongoing developmental process and is evident during family transitions, and that it is experienced in highly idiosyncratic ways. According to Laszloffy (2002), stressors put pressure on families to change roles, rules, and relationships. In an attempt to adapt to the developmental transitions, coping resources and stress management strategies may assist the family to adjust and stabilize to manage the transition into adolescence. According to

Lourie (1979), adolescence is a particularly stressful time in a family's development. It becomes problematic when the family does not have the resources to cope with the stress. This research could be expanded in the following ways: 1. by exploring parental stressors (typology, prevalence, and intensity); 2. by exploring the moderating effects of parents' perception of the stressors and the available resources in an attempt to impact parents' use of aggressive disciplinary strategies; and 3. using an ecological approach, which would broaden the conceptualization of the issue from a micro focus (individual and family) to one where external layers of the families' ecology are considered. Doing so may highlight risks and resources, and inform prevention and intervention strategies.

Another important finding in this study is the mutual influence of youth behaviors on continued parental use of aggressive strategies. According to SFD, the nature of family and youth development is bi-directional and mutually influenced, meaning that adolescents affect their parents as much as their parents affect adolescents (Farrington, 2004; Laszloffy, 2002, Lerner, 2004). This is not to suggest that youth are at fault for aggressive parent behavior, only that there is a mutual influence. Parents are responsible for providing a safe, nurturing environment where the rapid biological, emotional and social developmental changes that occur in adolescence can be experienced without fear of harm. The mutual influence of these negative behaviors identifies another pattern in early to middle adolescence that negatively affects the family system.

Adolescent externalizing behaviors demonstrated in early adolescence predicted parent physical and emotional aggression in middle adolescence. Youth externalizing behaviors triggered continued difficulties in parental coping (stressor pileup), resulting in

repeated cycles of parent physical and emotional aggression and negative youth behaviors, also consistent with Patterson's explanation of coercive family processes (1982). Parents modeled aggressive strategies to their adolescent, who then used similar strategies, influencing continued parent aggression. The effects of youth internalizing behaviors followed a slightly different pattern. It appears that when youth experience emotional difficulties consistent with internalizing behaviors in early adolescence, it predicts continued emotional but not physical aggression by their parents in middle adolescence. A possible explanation could be that parent emotional aggression impacts the youth self-esteem, damaging their sense of autonomy and leading to learned helplessness (Albrecht, Galambos, & Jansson, 2007). This in turn appears to impact continued parent emotional aggression in response to their adolescent. According to Albrecht and colleagues (2007), "It may seem reasonable from a parent's perspective to react to apathetic, distant, or uninvolved behavior with intrusive parenting" (p. 681), with the intent to stop their adolescents behavior. It could be that parents may not understand that some of their adolescent's emotional behaviors can be attributed to depression and anxiety. An alternative process may be at work. Gottman (1993) describes a construct referred to as "flooding" where it is proposed that negative emotions from one person in the system can impact the emotional responses from others in the system. In this case, when the youth experiences negative emotions (depression, anxiety) it may compromise the parent's ability to cope and therefore the parent responds in a negative, reactive way (continued emotional aggression at T2).

Grounded in systems theory, SFD explains that negative cycles between parents and adolescents may continue until there is a change in at least one part of the system. Systemic

change can be impacted by additional resources to reduce stress including for example, treatment, employment, improved finances, improved social support, relationship change etc., to reinforce coping, interrupt the violent cycle and improve adaptation. Surprisingly, parental physical or emotional aggression in early adolescence did not predict continued externalizing or internalizing behaviors in middle adolescence in this sample. A possible explanation could be that since the level of parent aggression in this sample was relatively low, a significant path between the two-year time periods was not established. Other studies have found a temporal connection (Patterson et al., 1992; Granic & Patterson, 2006; Trickett et al., 2009), however this study did not, and therefore hypothesis 2 is only partially met in the study.

Third, this investigation explored the quality of relationships with family and friends as possible mediators in the relationship between parent aggression and youth externalizing and internalizing behaviors. No evidence was found for mediation by the relationship variables. It may be the case that relationships act as buffers rather than pathways in the link between parent aggression and youth maladaptive behaviors. Since both family and peer relationships are identified as major influences in the lives of adolescents, continued exploration into their impact on youth outcomes is necessary. Important to note, the explored family and friend relationships were only assessed at T1. Developmental researchers have indicated that as youth progress through adolescence, the importance of the quality of relationships with friends becomes more important. Future research should explore the quality of relationships with friends and family during middle and late

adolescence, as they may have some impact on the pathway between parent aggression and youth maladaptive behaviors.

While the quality of relationships with family and friends did not have an indirect effect on the relationships between the parent aggression variables and negative youth outcomes, each had a direct relationship with youth outcomes. The quality of friendships had a weak and negative effect on externalizing and internalizing behaviors at T1, meaning that when youth reported lower scores for friendship quality, they demonstrated higher externalizing and internalizing behaviors. This is consistent with the developmental needs of early adolescents. Perhaps a more interesting finding from this study is that family relationships in early adolescence impact internalizing behaviors during middle adolescence. This finding confirms developmental researchers' assertion that connection with and support from families is a crucial factor in adolescent wellbeing. Without the grounding support of positive family relationships, both girls and boys experience anxiety, depression, and withdrawn behaviors. Family support and caring is a needed touchstone from which adolescents gain emotional support.

No gender differences were found for any models tested in this study, which is contrary to some research that associates parent aggression with internalizing behavior in girls and externalizing behavior in boys (McGee, Wolfe, & Wilson, 1997; Trickett & McBride-Chang, 1995). Findings from this study are important because the gendered nature of earlier research findings focused on internalizing behaviors for girls and externalizing behaviors for boys. If the expectation is that girls experience internalizing behaviors only or that boys will only act out behaviorally as a result of both types of parent aggression, then treatment

efforts are likely to overlook important vulnerabilities and reinforce gender stereotypes. This investigation demonstrated that both parent physical and emotional aggression and youth maladaptive behaviors form bi-directional and mutually influenced patterns of negative family behaviors that effect both girls and boys in a similar way.

In the context of parent-to-adolescent aggression during early and middle adolescence, treatment efforts need to be multilayered. A brief and process-oriented approach will be discussed in this section. Typically, youth and families in need of treatment are identified during times of crisis. In all cases and prior to in depth assessment, safety issues related to all family members must be assessed and accounted for. Theoretically, SFD would support a family-based approach to assessments that explores: 1. the type and intensity of the stressor presented. For example, is it a normative stressor and related to developmental issues or non-normative and possibly more disruptive to the family system? 2. developmental factors of the adolescent, their parents, and any other individuals defined as the family system; and 3. contextual factors including challenges and resources evident in the family's ecology. Efforts to reduce stress and identify resources in the family's ecology in early adolescence may interrupt longer-term negative parent and youth behavior patterns.

Treatment efforts need to consider the following findings: 1. both types of parent aggression, and youth internalizing and externalizing behaviors were stable during early and middle adolescence; 2. parent physical and emotional aggression, and youth externalizing behaviors in early adolescence predicted that both types of parent aggression continued in middle adolescence. A similar relationship was found between both types of parent

aggression and internalizing behavior with the following difference; internalizing behaviors at T1 only predicted parental emotional aggression at T2; 3. the quality of relationships with family had a cross-sectional and longitudinal impact on youth internalizing behaviors; and 4. the quality of relationships with friends impacted both externalizing and internalizing behaviors in early adolescence. Each finding informs treatment efforts. For example, since both types of parent aggression and youth maladaptive behaviors have been shown to be stable over time, early intervention with parents to increase parental warmth, improve communication, and understanding of adolescent development, as well as assisting parents to reduce the systemic stressors, may support a more nurturing environment. In terms of externalizing and internalizing behaviors, this research suggests that enhancing the quality of relationships with friends in early adolescence may have a small impact. Other efforts to increase family support (as defined in this study as quality of relationships) suggested that if youth and family relationships, including siblings and extended family were positive, internalizing behaviors would be impacted. The effects of family support were shown to be important in early and middle adolescence, and thus may prove to be important intervention points. Especially in light of the finding that internalizing behaviors in early adolescence predict continued parent aggression in middle adolescence.

Systemically, a change in one part of the system will bring change to the system as a whole. For example, if interventions to end parent aggression are successful in early adolescence, teens may develop the necessary coping strategies to successfully meet developmental tasks, reducing the risk of negative youth behavior and strengthening youth and family wellbeing. This theory-driven research provides evidence for the damaging

effects of parent-adolescent aggression and the negative patterns of behavior that arise. Since it was demonstrated that youth internalizing behaviors were significant drivers to continued parental emotional aggression, supports to increase parents' understanding of youth depression and anxiety may help the parent respond to the adolescent in a less reactive way. Additionally, youth externalizing behaviors in early adolescence proved to be significant drivers for both parental emotional and physical aggression during middle adolescence. Interventions that decrease negative youth behaviors may include, increasing the connection with positive peers and increasing parental warmth and monitoring, and may decrease continued parental aggression during middle adolescence. Negative youth behaviors are both a result of and a driver for parent aggression, demonstrating the complexity of negative family behavior patterns. To support positive and longer lasting change in families experiencing aggressive parent-adolescent interactions, this research identified that for both girls and boys intervening in early adolescence may impact youth and family wellbeing through middle adolescence.

In terms of prevention, this investigation demonstrated that patterns of relatively low levels of both types of parent aggression during adolescence have negative behavioral outcomes for youth. This research reinforces the need to target children who are at risk for developing problematic behaviors in order to support the adolescent and their families. Parent education addressing the harm of physical and emotional aggression toward youth should also include nonaggressive parenting strategies (negotiation, mediation, compromise, and nonreactive limit setting), adolescent development, adolescent depression and anxiety, stress management, social network development, and community

resources. Assessing other potential parent stressors including poverty, unemployment, substandard or lack of housing, divorce, illness, racism, and substance abuse will provide both areas for intervention as well as areas to strengthen with resources. The goal is to reduce stress and enhance resources and coping skills so that the family can experience improved long-term functioning, hence reducing the likelihood of a continuation of negative and harmful family patterns. This investigation also highlights the importance of early detection to interrupt behaviors shown to be stable as well as the importance of working with the whole family.

Limitations of the Study and Future Directions

Since parent reports were used to determine parent aggression, internalizing, and externalizing behaviors, response bias is a strong possibility. Primary caregivers reporting on their own aggressive parenting behaviors runs the risk of under-reporting the aggression that youth experienced because the acts of violence are only those that the parents were willing to admit. Even with this potential bias, this research was able to demonstrate the consistent and significant effect of parental physical and emotional aggression on negative youth outcomes. To address that limitation, future studies should use multiple sources including parent report and youth report, as well as other informants whenever possible (Silverman & Saavedra, 2004). A more thorough assessment is obtained when multiple informants as well as multiple situations are used to understand behavior. In terms of youth externalizing and internalizing behaviors, using both youth and parent reports may have provided a more accurate description of problematic youth behaviors.

The instrument used to assess parent-to-adolescent violence, The Conflict Tactics Scale, (Straus, 1979) was the original version of the scale. The newer version of the CTS that was published shows improved psychometric properties for measuring parent-to-child behaviors (Straus, Hamby, Finkelohr, Moore, and Runyan; Straus and Hamby, 1998). The later version of the CTS may have improved ability to identify specific forms of parent aggression than the version used in the current study. Additionally, having both parent and child reports of family violence may be ideal (Hamby & Finkelhor, 2000).

This study utilized the 12-year-old cohort only, and followed them through middle adolescence (approximately age 14). Therefore an obvious limitation is that the findings are limited to that age group. Expanding the age distribution in future studies would provide a wider range of developmental information on the relationships explored. Adolescence is a time period of major changes in relationships, autonomy and physical, cognitive and emotional development and therefore exploring a wider age range may yield differences.

Secondary data analysis challenges researchers because of the limitations of the instruments used and the data collected. This data set was appropriate to explore the prevalence of parent aggression rather than the intensity. Greater clarity of the negative impact of aggressive parenting may emerge by addressing how often the behaviors occurred. Although intensity was addressed at T1, it was not addressed at T2, which limited the current exploration to examining the impact of prevalence of parent aggression only.

The importance of the quality of relationships throughout adolescence cannot be understated. Unfortunately, the variables were only assessed at T1. Even with this limitation, significant effects of the quality of familial relationships at T1 continued to impact

internalizing behaviors at T2. Since developmentally, peer relationships are primary, assessing them at T2 (as well as at T1) would have provided a more accurate picture. Other factors including parental warmth and family cohesion were not assessed and may be important factors to consider in future research.

This study conceptualized relationship variables as possible mediating factors. According to Wu and Zumbo, (2007), mediation and moderating are competing causal theories through which a third variable operates between a cause and effect (Frazier, et al, 2004). The current study's review of the literature, theoretical perspective and models followed the hypothesis of mediation. Mediation was not indicated. Wu and Zumbo (2007) state that because a mediator is weak or does not show mediation that it should not be tested for both mediation and moderation effects. The role that the third variable plays should be determined by the researcher's theory. Given that assertion, it is beyond the scope of this study to explore whether the relationship variables may act as moderators between parent aggression and youth maladaptive outcomes. Having said that, future studies exploring the buffering effects of relationship variables on the effects of low levels of both types of parent aggression are important areas to explore. This is especially salient in light of the current study findings that the quality of relationships with family demonstrated cross sectional and longitudinal effects on youth internalizing behaviors. Utilizing a model exploring moderated mediation with family support conceptualized as a possible moderating effect and the quality of friendships with friends as a mediating effect on the relationships between parent aggression and negative youth outcomes may more accurately identify processes at work.

Another conceptual direction to explore in future research is the possible role that problem youth behaviors at one point in time could play in the relationship between types of parent aggression and the problem behavior experienced at a later point in time. For example, in this study there was not a significant association between either parental emotional or physical aggression at T1 and youth problem behaviors at T2 (both externalizing and internalizing). It could be that the problem behavior at T1 mediates the relationship between parent aggression at T1 and problem behavior at T2, which could effectively mask a significant relationship between the types of parent aggression at T1 and youth problem behaviors at T2. While it is beyond the scope of the current study, continuing to explore developmental pathways is crucial to understand how these associations operate in order to inform prevention and treatment efforts. This study also highlights the need to explore the possible indirect effects of parent aggression during middle adolescence on the relationship between the types of parent aggression at T1 and youth maladaptive behaviors at T2. It may be that the temporal relationship between the types of parent aggression at T1 and youth maladaptive behaviors at T2 were masked by a third variable.

While a strength of this study was the central positioning of Hispanic (49%) and African American (36%) youth and families, it should be mentioned that it is also a limitation in terms of generalizability, and therefore results may not be applicable to Caucasian youth or youth who were included in the “other” category. Data was collected from youth and families living in and around the urban Chicago area, therefore findings cannot be generalized to the larger population. While ethnicity was used as a control variable, it was not assessed as a moderating variable. While it was beyond the scope of this study, future

research should take into account the effects of ethnicity and race on the dynamic between parent aggression and youth maladaptive behaviors in order to expand treatment and intervention efforts to effectively address cultural differences.

Conclusion

Systemic family development model was used to conceptualize the complex relationships between parental physical and emotional aggression, the quality of relationships with friends and family, and externalizing and internalizing behaviors in youth during early and middle adolescence. Data from two waves of the Longitudinal Cohort Study were explored separately at T1 and T2 and then combined to understand the developmental and systemic effects of specific types of parental aggression and youth externalizing and internalizing behaviors over time. This investigation used path analysis to simultaneously examine relationships between observed variables through two waves of a study that spanned approximately 3 years.

This investigation fills a gap in research on parent aggression in adolescence in that it demonstrated that relatively low levels of physically and emotionally aggressive parenting behaviors are associated with troubling youth outcomes. The negative patterns that emerged were long lasting, which reinforced the cyclic nature of family violence. Negative behavior patterns were bi-directional between parent and adolescent, and while this study did not support evidence of a longitudinal association between the two types of parent aggression and youth maladaptive behaviors, it did suggest one between youth externalizing behaviors in early adolescence leading to parental physical and emotional aggression in middle adolescence, and youth internalizing behaviors in early adolescence

leading to parental emotional aggression in middle adolescence. Multilayered treatment efforts are required to address the negative patterns, which are sources of stress that impact individual and family development. It was suggested that failure to meet developmental tasks for individuals within the family and the family as a whole result in continued maladaptive behavior patterns. A systemic, family-centered developmental perspective is the lens offered to interpret the findings of this research.

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EDUCATION

Syracuse University, Falk College of Sport and Human Dynamics, Syracuse, N.Y.

PhD. in Child and Family Studies May 2013

Dissertation Title: *Parent Aggression and Internalizing and Externalizing Behaviors: Stability and Mutual Influence*

Dissertation Chair: Professor D. Bruce Carter, MA, PhD, Associate Professor, Child and Family Studies

MSW, School of Social Work, May 1991

BSW, School of Social Work, May 1990

UNIVERSITY TEACHING EXPERIENCES

Human Behavior in the Social Environment

Syracuse University School of Social Work, Fall 2011, Fall 2012

Instructor

Gerontology

Syracuse University Department of Child and Family Studies, Spring 2009, Fall 2012

Teaching Assistant, 2009. Instructor, 2012

Critical Incidents in Family Development

Syracuse University Department of Child and Family Studies, Fall 2008 and Spring 2010

Instructor

Generalist Social Work Practice I

Syracuse University School of Social Work, Fall 2008

Instructor

Solution Focused Interventions with Families

University Of Buffalo School of Social Work, Summer 1997

Visiting Lecturer

Generalist Social Work Practice II

Syracuse University School of Social Work, Spring 1997

Instructor

Generalist Social Work Practice I

Syracuse University School of Social Work, Fall 1996

Instructor

Social Work Practice in Child Welfare

Syracuse University School of Social Work, Spring 1996

Instructor

Generalist Social Work Practice I

Syracuse University School of Social Work, Fall 1996

Instructor

UNIVERSITY EXPERIENCES

Research Assistant, Syracuse University, Department of Civil and Environmental Engineering, 2009-2011

- ***From the Battlefield to the Classroom: Designing Pathways to Engineering for American GI's***, National Science Foundation Research Grant, NSF 09-29
- Participated in every aspect of multidisciplinary research project including research design, model development, team training, sample recruitment, data collection and analysis.
- Co-Facilitated multiple focus groups that included officers, enlisted service persons, and veterans with the goal of understanding aspirations and support needs for higher education specifically geared toward STEM-related careers. Participants included active duty and veteran service members involved in Operation Enduring Freedom and Operation Iraqi Freedom.
- Collaborated with researchers from diverse scientific and technical backgrounds
- Completed components of literature review
- Transcribed multiple focus group sessions, participated in theme generation, coded data
- Co-authored Moderator Guide and Facilitator Training Materials
- Participated in analysis of research findings

Student Support Counselor, Syracuse University, Falk College of Sport and Human Dynamics, 2009-2012

- Counseled students at the highest risk of suspension and/or expulsion from the Falk College at Syracuse University
- Provided psychosocial assessments and referrals
- Worked with multidisciplinary professionals to support at-risk students
- Provided research on best-practice student advising
- Participated in team meetings and case consultation
- Participated in college-wide suspension hearings
- Collaborated with university and community professionals on behalf of students

NON-PROFIT EXPERIENCES

Child and Family Evidenced-Based Coordinator, Liberty Resources, Syracuse, NY, 2004-2006

- Member of senior management team
- Responsible for supervision of program directors
- Provided oversight of implementation and evaluation of evidence based treatment
- Responsible for strategic program expansion
- Participated in community collaborations with Juvenile Justice and Child Welfare , Mental Health, and the Office of Developmental Disabilities

Executive Director, McMahon/Ryan Child Advocacy Site, Syracuse, NY, 2002-2003

- First executive director of agency
- Forged strategic relationships with criminal justice mental health and medical systems

as well as other service providers in the community

- Managed budgets
- Represented agency in the community
- Reported monthly to Board of Trustees

Deputy Chief Executive Officer, Cayuga Home for Children, Auburn, NY, 2000-2002

- Oversaw three agency departments including residential treatment, community-based resiliency, and OMRDD programs
- Created and monitored policies and procedures
- Created systems of programmatic monitoring and evaluation
- Acquired national agency accreditation
- Monitored budgets
- Supervised agency leadership
- Participated in community coalitions
- Sat on Judges committee
- Participated in yearly conference development
- Responsible for oral and written reports to governing body, program funders and stakeholders

Coordinator, Continuous Quality Improvement, Cayuga Home for Children, Auburn, NY, 1997-2002

- Created systems to ensure program compliance
- Created process of regular program evaluation
- Met with program directors for departmental reviews
- Supervised Resiliency program directors
- Recommended programmatic changes, policy and procedural modifications
- Reported findings to CEO and Board of Trustees

Director, Family Resiliency Department, Cayuga Home for Children, Auburn, NY, 1994-2002

- Oversaw several treatment-based programs for youth and families
- Responsible for multiple budgets
- Authored several program expansion grants
- Supervised professional staff
- Responsible for monthly program reports
- Responsible for quarterly and yearly program evaluations
- Lead and participated in yearly retreats

Supervisor, Family-Based Services, Cayuga Home for Children, Auburn, NY, 1991-1994

- Supervised masters level therapists
- Provided crisis-intervention for families
- Provided regular staff training
- Managed a caseload
- Responsible for program oversight, reporting and program evaluation
- Responsible for grant writing

EXPERIENCE IN AGENCY ACCREDITATION

- **Principal Administrator**, initial accreditation through the Council on Accreditation for Services for Children and Families (COA), Cayuga Home for Children, achieved 2001
- **Community Representative** for re-accreditation through CSWE, Syracuse University School of Social Work, 2005

GRANT ADMINISTRATION

Primary Author

- Functional Family Therapy, Department of Health and Human Services Safe Schools sub-grant, \$250,000
- Multidimensional Treatment Foster Care, NYS Health and Human Services, \$250,000
- Children's Services Initiative, NYS Office of Mental Health, \$30,000
- Family Reunification, Cayuga County Block Grant, \$134,000
- Family Support Program, Cayuga County Block Grant, \$110,000
- Family School Partnership Program, Cayuga County Block Grant, \$160,000
- Family Support and Reunification, Seneca County Block Grant, \$220,000

Contributing Author

- Multidimensional Treatment Foster Care, Miami/Dade County, Florida
- Federal Office of Juvenile Justice and Delinquency Prevention, 2006, \$370,000
- Options For People Through Services, Onondaga County, New York, The Office of Mental Retardation and Developmental Disabilities (Federal), 2005, \$2,000,000
- Multisystemic Therapy, Tioga County Block Grant, New York, 2005, \$90,000

CERTIFICATIONS AND MEMBERSHIPS

- New York Licensed Master Social Worker through July 2013
- National Association of Social Workers, member
- National Council on Family Relations, member

Society of Research in Child Development, member