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Parent-Directed Physical Aggression by Clinic-Referred Youths

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Identified children and young adolescents who engaged in parent-directed physical aggression from a sample of youths referred for outpatient therapy (N = 606, 151 girls, 455 boys); examined the frequency, severity, and characteristics of such behavior; and compared aggressive youths with nonaggressive youths across several domains of functioning. Twelve percent of the children and young adolescents in this clinical sample engaged in parent-directed aggression. Aggressive, compared to nonaggressive, youths had significantly increased oppositional behavior, lower frustration tolerance, less adaptability to stressful situations, and were more demanding of their parents. Aggressive children had families characterized by significantly greater parental stress, poorer interpersonal relationships, and were more likely to be 2-parent, European American families of higher socioeconomic status. Moreover, lower frustration tolerance and adaptability were significant predictors of parent-directed aggression after controlling for demographic differences and overall level of oppositionality and aggressiveness, suggesting a more specific functional impairment in such children. Parent-directed aggression warrants additional study given the limitations in our understanding of these events and the potential for such behaviors to continue into adolescence and adulthood.

Violence in the home can take many forms, as reflected in physical abuse of the child, abuse between intimate adult partners, and exposure of the child to violence. Less frequently discussed and investigated is physical aggression toward parents and caregivers by their young children.[1] The sparse evidence available suggests that children engage in parent-directed physical aggression at surprisingly high rates. For example, in a large-scale study of domestic violence, 18.0% of families surveyed ($N = 2,143$) reported that their children had hit them over the course of the 1-year survey period (Straus, Gelles, & Steinmetz, 1980). In another survey, 13.7% of children and adolescents ($N = 445$) reported that they had hit one or both parents (Paulson, Coombs, & Landsverk, 1990). These studies highlight the scope of the problem; however, little is known about the frequency and severity of such behavior or about associated family, parent, and child characteristics. Case studies and anecdotal reports have repeatedly referred to the problem (e.g., Barcai & Rosenthal, 1974; Harbin & Madden, 1979; Micucci, 1995). Our own clinical work also has revealed frequent, surprising, and concrete instances in which young children have physically harmed their parents.

Progress in studying parent-directed aggression is hampered by two key obstacles. First, there is a lack of agreement about how to classify and define such behaviors. Previous authors have used the term *parent abuse* to encompass a broad range of aggressive behavior toward parents, sometimes including verbal aggression and threats of violence. This terminology ignores important distinctions among the commonly used definitions of aggression, violence, and abuse. Aggression refers generally to "behavior that is aimed at harming or injuring another person or persons" (Parke & Slaby, 1983, p. 550). Alternatively, the terms *violence* and *abuse* are typically reserved for aggressive behaviors that cause harm to the recipient. More specifically, the term *violence* refers to behavior in which physical harm is intentionally caused, and *abuse* refers to intentional harm or maltreatment that is not necessarily physical (e.g., verbal abuse or emotional abuse). Young children engage in physically aggressive behavior toward their parents that, due to their relative size or physical ability, often does not cause physical harm to the parent. Therefore, we recommend use of the term *parent-directed aggression* to refer to behavior in which a child makes physical, aversive contact with a parent or caregiver with the intent of causing

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[1]Throughout this article we use the terms *parents* to refer to parents or caregivers/guardians and *children* to refer to children and young adolescents unless otherwise noted

harm. More severe instances of such behavior may be considered violent or abusive, but they are not necessarily so. This definition excludes the verbal aggression to which parents are often subjected. Verbal aggression toward parents is worthy of independent study but is clearly distinguishable from more dangerous, physically aggressive behaviors.

Second, the absence of measures to operationalize and assess parent-directed aggression greatly limits research. Without such measures, evaluation of the characteristics of parent-directed aggression, the continuum of aggressive actions directed toward parents, and the child, parent, family, and contextual factors with which these actions may be associated, cannot be studied. This study was designed in part to address these major obstacles to research on parent-directed aggression.

Because of these limitations, basic features of parent-directed aggression remain unknown, such as the type, frequency, and severity of aggressive behaviors that are performed, as well as associated child, parent, and family characteristics that may be useful for the identification and treatment of such children. As a point of departure, there are general child characteristics we would expect to observe in those engaging in parent-directed aggression. For instance, it is expected that children engaging in parent-directed aggression are more likely than other children to engage in overt, oppositional behavior more generally. Indeed, previous classification schemes have distinguished between children with conduct problems who engage in overt or confrontational antisocial behavior (e.g., fighting, arguing) and those who engage in covert antisocial behaviors (e.g., stealing, truancy, fire-setting; Loeber & Schmaling, 1985), and there is reason to believe that such a distinction would exist for children engaging in parent-directed aggression. Moreover, given that more severe physical aggression is associated with the male sex (Loeber & Hay, 1993; Maccoby & Jacklin, 1980) and older child age (see Coie & Dodge, 1998), we would expect that children who engage in parent-directed aggression are more likely to be male and to be older than nonaggressive children.

Clearly, all oppositional and aggressive children do not engage in physical aggression toward their parents. Therefore, the identification of child, parent, and family factors more specifically associated with such behavior is of great interest. It may simply be that children who are aggressive toward their parents are more oppositional than other children, and parent-directed aggression occurs as a result of this higher level of general oppositional and aggressive behavior. Considering the strong social and physical consequences associated with child physical aggression toward parents, it is also likely that such behavior is the result of deficits in behavioral inhibition and frustration tolerance, particularly in response to social threats or stressors. Such deficits are related to oppositional and aggressive behavior in children more generally (e.g., Lahey, Hart, Pliszka, Applegate, & McBurnett, 1993; Mattsson, Schalling, Olweus, Low, & Svensson, 1980) but may be particularly severe in the case of parent-directed aggression. Therefore, children engaged in parent-directed aggression may differ from other children in their ability to respond appropriately to environmental stressors and to have lower frustration tolerance, to have poorer adaptability to stressful situations, and to be more difficult for, and demanding of, their parents.

Apart from characteristics of the child, there are likely many contextual differences that distinguish children who are aggressive toward their parents. For example, children who engage in parent-directed aggression be more likely to be recipients of physical aggression from their parents or to witness physical aggression between their parents. This would support the theory that modeling and retaliation play a role in the etiology of parent-directed aggression (Straus et al., 1980) and would be consistent with other literatures suggesting these factors are related to other forms of domestic violence (e.g., American Psychological Association, 1996; Danielson, Moffitt, Caspi, & Silva, 1998). Additionally, parents of aggressive children may experience higher levels of parenting stress, depression, and symptoms of psychopathology than nonaggressive parents as a result of such aggression. Alternatively, the presence of parental stress and psychopathology may predispose children to be aggressive toward their parents via factors such as permissive parenting styles or more inconsistent parenting practices. Clearly, the relation of aggression by the child and parent stress and psychopathology warrants attention.

In addition, the family environment of children who engage in parent-directed aggression is expected to differ from that of nonaggressive families in several ways. Aggressive behavior by the child would be expected to reflect broader untoward interactions and interpersonal relations. First, children who engage in parent-directed aggression are expected to have poorer interpersonal relationships with other family members than nonaggressive children. Second, family characteristics related to socioeconomic status are also likely to differ between aggressive and nonaggressive children. Children from families characterized by social disadvantage (i.e., lower income, ethnic minority status, single-parent families) typically experience more severe conduct problems (e.g., Luthar, 1999; Maughan, 2001). Interestingly, however, two previous studies of parent-directed aggression have suggested that children from such families are *less* likely to engage in such behavior than children from more socially advantaged families (Charles, 1986; Paulson et al., 1990). Methodological limitations of these studies (e.g., sole reliance on long-term, retrospective child-report) great-

ly limit the validity of these findings. The relation of contextual influences to child aggression toward parents clearly warrants attention.

If the aforementioned child, parent, and family factors are related to parent-directed aggression, it would be instructive to know whether children engaging in parent-directed aggression differ on these variables merely because they are more oppositional and aggressive in general, or whether there are deficits or dysfunctions that are specifically associated with this behavior. That is, it would be of interest to know whether the differences between children engaging in parent-directed aggression and other children are quantitative (i.e., simply a higher level of oppositionality and aggressiveness) or qualitative (i.e., the result of more specific characteristics or impairments) in nature. The identification of factors associated with parent-directed aggression above and beyond the effects of increased oppositionality and aggressiveness would provide important information about possible etiologies and interventions for this population.

In light of the paucity of evidence and the absence of information on characteristics of children who engage in parent-directed aggression, this study was designed to (a) identify youths from a clinic-referred sample who were physically aggressive toward a parent; (b) describe the frequency, severity, and characteristics of the such aggression; (c) identify child, parent, and family characteristics of clinic-referred youths who engaged in parent-directed aggression; and (d) examine the usefulness of these characteristics in predicting the presence of such behaviors.

The study was completed with children referred for conduct problems (oppositional, aggressive, and antisocial behavior). Conduct problems are the most frequent basis of child and adolescent outpatient and inpatient referrals and are estimated to be the most costly mental health problem in the United States (Kazdin, 1995; Robins, 1981). Youths referred for conduct problems have a much higher rate of exposure to other forms of abuse (e.g., child abuse, domestic abuse) than children referred for many other clinical problems. Hence, the base rate for parent-directed aggression is likely to be relatively high and can serve as an initial point of departure for identifying a sample of children who engage in the index problem. In addition, previous studies of such behaviors have attempted to identify and characterize children who are aggressive toward their parents by comparing them to nonaggressive children. However, the control groups in such studies have not been composed of children with conduct problems. Thus, it is unclear whether the previously observed differences are related specifically to parent-directed aggression or to conduct problems more generally. The use of a control group of clinic-referred children with conduct problems in this study will allow a more specific evaluation of such differences.

Several hypotheses guided this study. First, we hypothesized that, compared to clinic-referred peers with conduct problems, children engaging in parent-directed aggression would be characterized by more oppositional and aggressive behavior and by greater difficulties responding appropriately to stressors, as evidenced by less frustration tolerance, poorer adaptability to stressful situations, and greater demandingness toward parents. Second, the specificity of the previous hypothesis implies a null-hypothesis corollary, namely, that children who are aggressive toward their parents would *not* differ from other children on more general measures of child dysfunction. That is, we predicted that children who are aggressive toward their parents would not be more deviant on measures of covert or nonaggressive antisocial behaviors (i.e., stealing, lying, truancy) or on measures of overall clinical dysfunction. Third, we hypothesized that the parents of such children would be characterized by engaging in higher levels of physical aggression directed at spouses and toward children, greater parenting stress, depression, and overall psychological symptoms. Fourth, we expected the family environment of children who were aggressive toward their parents would be characterized by poorer interpersonal relationships. Apart from these hypotheses, we explored several descriptive characteristics associated with such behaviors. Fighting and aggression are more characteristic of older and male children; therefore, the influence of age and sex on parent-directed aggression was examined. We also examined socioeconomic disadvantage and its relation to parent-directed aggression given the pervasive influence disadvantage has on mental and physical health of children and adults (e.g., Adler et al., 1994; Luthar, 1999).

Although we have hypotheses based on the extant literature, the paucity of both theory and research on the topic of parent-directed aggression underscores the importance of initiating work and providing data from which more informed hypotheses might be generated. Consequently, the primary goals of the study were to develop a definition and measure that permits research, to describe the sample of aggressive children, and to examine domains of child, parent, and family functioning that are likely to be related to parent-directed aggression, as derived from literatures that are most pertinent to the topic (e.g., abusive families, characteristics of aggressive children).

Method

Participants

The study was conducted at the Yale Child Conduct Clinic, an outpatient treatment service for children referred for oppositional, aggressive, antisocial behavior. Participation was initiated by families who contacted a

child psychiatry triage center that served a large catchment area or by direct contact with the clinic. All parents provided written informed consent, and children provided written (if age of 7 years and above) and verbal (if age of less than 7 years old) assent. Children and families subsequently completed an initial evaluation to assess child, parent, and family functioning and then began treatment. Participants included 606 children (151 girls, 455 boys) and families referred for treatment. Children ranged in age from 2 to 14 years (M = 8.3, SD = 2.8). Three hundred seventy-four (61.7%) were European American, 167 (27.6%) were African American, 38 (6.3%) were Hispanic American, and 27 (4.5%) were of other or mixed ethnic origins. Full-scale Wechsler Intelligence Scale for Children—Revised (Wechsler, 1974) intelligence quotients ranged from 56 to 144 (M = 97.1, SD = 17.2).

To obtain diagnoses for the children, clinicians interviewed the parents using the Research Diagnostic Interview (Kazdin, Siegel, & Bass, 1992), a structured diagnostic interview to assess the presence, absence, and duration of symptoms, based on criteria from the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., rev.; American Psychiatric Association, 1987). The interview was a modified form of the Schedule of Affective Disorders and Schizophrenia for School-Aged Children (Chambers et al., 1985). Evaluation of the diagnostic interview by an independent observer yielded a high agreement ($\kappa > .95$ across all diagnoses). Primary Axis I diagnoses included conduct disorder (43.0%), oppositional defiant disorder (29.8%), attention deficit hyperactivity disorder (7.0%), major depressive disorder (5.2%), various other disorders (9.4%), and no diagnosable Axis I disorder (5.7%). Most children (73.5%) met criteria for more than one disorder (M = 2.3, SD = 1.2).

The primary caretaker of the child included biological mothers (91.8%); step-, foster, or adoptive mothers (6.0%); or other relatives (2.2%). Mothers ranged in age from 17 to 61 years (M = 34.2, SD = 6.5); 52.0% of children came from single-parent families. Families were classified according to level of educational and occupational attainment (Hollingshead, 1975), from lower to higher socioeconomic classes: Class I, 13.6%; II, 18.9%; III, 27.9%; IV, 27.2%; V, 12.3%. Median monthly family income ranged from $1,501 to $2,000 (rated on a 9-point scale from 1 [*0 to $500/month*] to 9 [*more than $5,000/month*]); 30.7% of the families received public assistance.

Group Formation

The primary goal of this study was to evaluate characteristics of children who were physically aggressive toward their parents or caretakers. On referral to the clinic, all families received child therapy only (10.8% of all cases), parent management training only (35.7%), or a combination of these two approaches (in which case two therapists were assigned to the family; 53.5%). Twelve therapists (10 women and 2 men, ages 23 to 56, 10 with a master's degree and 2 with a doctorate) provided treatment and participated in the assessment of children and parents (as detailed in the following). Therapists had training in treatment with children, families, or both before coming to the clinic and then received 6 to 12 months of supervised training in these specific, manualized treatments. Several procedures were in place to supervise treatment delivery and to maintain treatment integrity (Kazdin, 1996).

As a part of treatment, therapists had extended contact with the children and families over the course of 4 to 5 months with weekly treatment sessions and telephone contact 1 to 2 times weekly. As a result, they were familiar with the interactions at home, which for all treatments were a main focus of the intervention. For the purposes of this study, the therapist(s) classified each child as to whether he or she engaged in physical aggression directed at a parent. Prior to making this classification, therapists participated in meetings to discuss and identify aggressive behaviors, to review case examples of aggressive versus nonaggressive behavior, and to discuss how to handle difficult cases (e.g., suspected but no firm evidence of parent-directed aggressive behavior). The meetings served as an orientation and training; the actual evaluations were made by the therapist in charge without group discussion. In cases where two therapists were involved (i.e., combined child therapy and parent management training), therapists reached an agreement based on the combined information from the child and parent about the performance of parent-directed aggression by that child. In general, parent-directed aggression was considered to have occurred if either therapist was able to document such behavior, that is, provide a detailed instance in which a child was physically aggressive toward a parent. There was no case in which after brief consultation therapists did not agree on the presence or absence of such behavior. In cases where parent-directed aggression reportedly occurred, the treating therapist(s) completed the Parent-Directed Aggression Inventory (described subsequently) to describe the extent of the aggressive behavior.

We identified cases only on the presence of physical aggression (i.e., rather than verbal aggression, as stated previously). The goal was to identify clear and unequivocal instances of aggression and children whose type and frequency of aggression would be at the extreme and qualitatively distinct. For example, among the cases included as aggression toward a parent, one 12-year-old regularly kicked his mother in the stomach whenever he was angry or did not wish to comply with a request (e.g., to go to bed, do homework); another 8-year-old girl broke the ribs of her mother by jumping up and down on her during one violent episode. Less

extreme cases of parent-directed aggression, although of lower severity than most identified cases, were also readily distinguishable from nonaggressive cases. For instance, one 6-year-old boy would punch his mother or father very hard whenever they refused his requests. Another 8-year-old girl would shove her mother forcefully with both hands and push her backward when she became angry. Once identified, we examined such aggression more generally, that is, multiple forms of physical maltreatment of a primary caretaker by the child. Such behavior included kicking, biting, shoving, hitting, beating, throwing objects, and using a weapon against the parent.

Therapists identified children for whom there was definite parent-directed aggression (i.e., behavior in which a child makes physical, aversive contact with a parent or caregiver with the intent of causing harm). To ensure that the sample included clear instances of such behavior, therapists were required to elicit from parents and record at least one specific instance in which such aggression occurred. Children who were only *suspected* of aggression toward their parents or in cases in which a concrete example could not be provided were not counted as aggressive. This is a conservative test of the characteristics of children engaging in parent-directed aggression because it is possible and indeed likely that cases of parent-directed aggression that were not detected are in the control sample. In addition, although we were unable to directly assess each child's intent in each instance, children were only classified as having engaged in parent-directed aggression if a parent indicated to the therapist that the physical contact in question was initiated by the child and intended to cause physical harm, rather than the inadvertent result of some other behavior (e.g., a tantrum or struggle in which the child accidentally makes contact with the parent).

Assessment

Several child, parent, and family characteristics were examined based on features likely to be associated with aggression. All characteristics were assessed at initial intake and well in advance of knowing the abuse status of the children. The characteristics included child severity and history of oppositional and antisocial behavior, child ability to respond appropriately to stressors, parental stress and psychopathology, socioeconomic disadvantage, family constellation, and family conflict. Measures drew on multiple assessment methods (interviews, questionnaires) and informants (parents, teachers, and clinicians).

General Information Form. To describe the families, all parents completed a General Information Form at intake. In relation to this study, a few characteristics deserve mention. Socioeconomic disadvantage and difficult family living conditions were assessed on this form. We measured family level of educational and occupational attainment (Hollingshead, 1975), family income level, receipt of public assistance, and family structure (one- vs. two-parent families), all of which we expected to place children at risk for parent-directed aggression.

Parent-Directed Aggression Inventory. As noted previously, there is no standardized scale to measure characteristics of parent-directed aggression. We used a measure completed by therapists to characterize the nature, severity, and frequency of aggressive episodes on the part of the children. The Parent-Directed Aggression Inventory (Kazdin, 1998) included seven physical abuse items, each of which denoted a specific form of aggression children could invoke on their parents.[2] Sample items, from less to more severe, included pushing, grabbing, or shoving; kicking or biting; and using a knife or gun. A blank space was allowed for other aggressive behavior to accommodate aggressive acts not covered by one of the other categories. For each item, the therapist evaluated via their contact with the child and parent(s) whether or not this behavior had occurred, and if so how often and how severe it was. Frequency and severity were each rated on a 5-point scale, ranging from 1 (*rarely, not very severe*) to 5 (*very often, extremely severe*).

The Parent-Directed Aggression Inventory assessed additional characteristics of the aggression, such as who was the recipient of the aggression, how many different recipients there were, the age of onset of aggression (if known), and speculation on the motivation or reason(s) the child might engage in such behavior (e.g., anger, retaliation, frustration, fear, sadness, and others). There is of course no way in which the parent or therapist could know the actual motivation; however, this item was included to explore possible options and to generate hypotheses for further study. In other contexts, we have been able to identify meaningful subtypes of clinical problems (fire-setting) based on distinguishing different motivations (Kolko & Kazdin, 1991).

Child functioning. Child functioning encompassed three main domains, drew on five measures, and utilized both parent- and teacher-report. First, we expected aggressive children to differ from nonaggressive children on measures of oppositional, antisocial, and more generally aggressive behavior. The presence of the child's oppositional and antisocial behavior was assessed by counting the total number of conduct dis-

[2]Several individuals were directly involved in development of the Parent-Directed Aggression Inventory, including Elif Attaroglu, Jerusha Detweiler-Bedell, Lisa Holland, Bernadette Lezca, and Gloria Wassell. A copy is available from the second author.

order and oppositional defiant disorder symptoms endorsed on the Research Diagnostic Interview. In addition, the Interview for Antisocial Behavior (Kazdin & Esveldt-Dawson, 1986) was completed by all parents. The Interview for Antisocial Behavior is a 30-item, 5-point measure that assesses presence and severity of dysfunction on a range of overtly aggressive behaviors (e.g., "My child has a problem with getting into many fights") and covert (nonaggressive), antisocial behaviors (e.g., "My child has a problem with stealing from stores") in the child. The Overt Aggression and Covert Antisocial subscales were used in this study to examine the specificity of group differences on these constructs. The internal consistency ($\alpha = .91$) and convergent and discriminant validity of the Interview for Antisocial Behavior have been demonstrated in prior studies (Kazdin & Esveldt-Dawson, 1986; Kazdin, Esveldt-Dawson, Unis, & Rancurello, 1983).

Second, we expected aggressive children to have more difficulty responding appropriately to stressful situations. Children's capacity for frustration tolerance was assessed using the 10-item, 5-point Frustration Tolerance subscale (e.g., "My child copes well with failure") of the Health Resources Inventory (HRI; Gesten, 1976). Classroom teachers of all children completed the HRI, which consists of 54 items rated on a 5-point scale ranging from 1 (*describes the child not at all*) to 5 (*describes child very well*). Several factors (Good Student, Adaptive Assertiveness, Peer Sociability, and Following Rules at School) are included. In this investigation, the Frustration Tolerance subscale of the HRI, which has demonstrated adequate test–retest reliability ($r = .87$; Gesten, 1976) was examined separately to address our prediction that aggression would be associated specifically with deficits in this domain.

To assess children's adaptability to different situations and their demandingness at home, we use two subscales from the Parenting Stress Index (PSI; Abidin, 1990). An 11-item, 5-point subscale related to parental report of adaptability of the child (e.g., "My child gets upset easily over the smallest things") and a 9-item, 5-point subscale related to parental report of the demandingness of the child (e.g., "My child makes more demands of me than most children") were examined separately to test the hypotheses that aggressive children have a poorer capacity for adaptability and are perceived as more demanding of their parents than are nonaggressive children. The internal consistency (αs = .66 and .62, respectively) and various types of validity of the PSI subscales have been reported previously (Abidin, 1990; Loyd & Abidin, 1985).

Third, we expected that aggressive children would *not* differ from other clinic-referred children on more global measures of functioning. Overall child dysfunction was measured using parent- and teacher-report on the Child Behavior Checklist (CBCL; Achenbach, 1991). The CBCL is a 118-item, 3-point measure that assesses multiple problem areas. For this investigation, the total externalizing score was evaluated to assess severity of dysfunction across a broad range of externalizing behaviors occurring at home and at school. The psychometric properties of the CBCL, and of the Externalizing subscales rated by parents and teachers more specifically, have been well studied and are adequate for use with children of this age group (Achenbach, 1991).

To assess adaptive and competence-related behaviors, we used data from the HRI, mentioned previously. The total competence score (sum of all scales) provides an overall index of positive, prosocial functioning. Competence scores reflect adaptive functioning and are not merely explained by the absence of psychopathology (see Gesten, 1976). Because we used one of the subscales (Frustration Tolerance) to address a separate prediction (mentioned previously), we subtracted the score from this subscale in computing competence from the HRI. Psychometric evaluation has demonstrated stability of performance on the HRI (test–retest reliability = .87) and alternative types of validity (e.g., convergent and criterion group with clinic and nonreferred samples; Gesten, 1976).

Parent and family functioning. The level of spousal and child abuse in the home was assessed using two measures of abuse. Parents completed the Conflict Tactics Scales (Straus, 1979) and the Child Abuse Potential Inventory (Milner, 1986). The Conflict Tactics Scales is a widely used instrument that consists of several scales designed to measure the use of reasoning, verbal aggression, and violence by different family members to resolve conflicts with other family members. For this study, we used the subscales that measure the frequency of parent-to-child physical aggression (9 items scored on a 6-point scale) and intimate partner physical aggression (9 items scored on a 6-point scale). The Conflict Tactics Scales subscales are widely used and have demonstrated acceptable levels of reliability ($\alpha = .62$ and .88, respectively) and validity (Straus, 1979). The Child Abuse Potential Inventory is a parent self-report scale used to identify abusive or neglectful parents. Parents are asked whether they agree or disagree with 160 statements about their beliefs about their child, themselves, and others. For this study, we used the 77-item Abuse scale, which has been shown to predict abuse status. The Child Abuse Potential Inventory Abuse scale has been shown to possess high internal consistency ($\alpha = .92$ to .98) and test–retest reliability ($r = .91$; Milner, 1986) and has provided evidence of predictive and construct validity (Milner, Gold, Ayoub, & Jacewitz, 1984; Milner, Robertson, & Rogers, 1990). These two measures were not part of the initial study protocol at our clinic, and therefore data for these two measures are available for only a subsample of participants.

Parent stress and psychopathology are both risk factors for other forms of aggression in the home (e.g., Wolfe, 1999) and were expected to be associated with parent-directed aggression in this study. They were assessed using three measures of parent dysfunction. The PSI (Abidin, 1990) was used to assess overall level of parental stress. The PSI is composed of separate subscales for Child and Parent Domains. Because we were interested in assessing parents' subjective feeling of stress (rather than child behaviors that might lead to parenting stress), we used the Parent Domain score as a measure of parenting stress. Various forms of reliability ($\alpha = .93$) and validity of the scale have been evaluated with multiple samples (Abidin, 1990; Lloyd & Abidin, 1985). The Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), a 21-item scale for which the parent selects 1 of 3 statements that differed in the presence and severity of parental depression, was used to assess parents' depressive symptoms. To sample a broader range of clinical symptoms, parents also completed the Symptoms Checklist–90 (Derogatis & Cleary, 1977). The Symptoms Checklist–90 includes 90 items rated on a 5-point scale that reflect the degree of discomfort across several symptom areas. The total score was used as an overall index of psychological dysfunction. The psychometric properties of the Beck Depression Inventory and Symptoms Checklist–90 have been studied extensively.

The quality of the children's family environment was assessed using the Family Environment Scale (Moos & Moos, 1981). Because we were particularly interested in assessing the quality of interpersonal relationships within the family, we used the 27-item, true/false Family Relationships Index of the Family Environment Scale. The internal consistency of this subscale ($\alpha = .89$) has been demonstrated previously (Moos, 1990; Moos & Moos, 1981).

Results

Frequency and Description of Parent-Directed Aggression

Seventy-four children (12.2%) were identified as engaging in physically aggressive behavior toward a parent. The reported frequency of each type of aggressive behavior is presented in Table 1. As might be expected, less severe forms of aggression (e.g., pushing and grabbing) were performed more frequently than more severe forms (e.g., beating). However, most children who engaged in parent-directed aggression (89.2%) engaged in relatively severe types of aggressive behavior that included throwing an object, hitting or slapping, kicking or biting, or beating a parent (i.e., only 10.8% of children classified as physically aggressive toward a parent engaged in only pushing, grabbing, or shoving a parent). No children in this sample used a knife or gun to injure a parent. Overall, the aggression reported was indicated to be of moderate frequency ($M = 2.8$; $SD = 1.0$), which was represented by a response of "pretty often (5–6 times per year)." The severity of the aggressive acts was of moderate severity ($M = 2.6$; $SD = 1.1$), which was represented by a response of "moderate severity (e.g., a somewhat extended episode, resulting in marked pain and minor injury such as bruises)." Aggressive children were usually aggressive toward only one parent ($M = 1.4$, $SD = .69$), most often the biological mother. The main motive of the aggressive behaviors was reported most often as anger, lack of coping skills, and frustration. Aggressive children ranged in age from 2.6 to 14.0 years, and the mean age of reported onset of parent-directed aggression was 5.0 years ($SD = 2.7$).

Table 1. *Type, Frequency, and Characteristics of Parent-Directed Aggression*

	n or *M*	% or *SD*
Push/grab/shove parent	67	90.5
Hit/slap parent	57	77.0
Throw object at parent	42	56.8
Kick/bite parent	35	47.3
Beat parent	13	17.6
Use a knife or gun	0	0.0
Other physical abuse	0	0.0
Mean Frequency	2.8	1.0
Mean Severity	2.6	1.1
Physical Aggression Index	15.9	8.7
Recipient of aggression		
Biological mother	65	87.8
Biological father	2	2.7
Adoptive mother	4	5.4
Other	3	4.1
Motive for aggression (Parent report)		
Anger	63	85.1
Lack of coping skills	53	74.3
Frustration	48	64.9
Desire to assert control	38	51.4
Anxiety	23	31.1
Retaliation for child abuse	20	27.0
Lack of social support in home	12	16.2
Sadness	10	13.5
Fear	6	8.2

Note: $n = 74$.

We examined differences between boys and girls who engaged in parent-directed aggression for each type of aggressive act and for total frequency and severity of aggression, using chi-square and *t* tests, respectively, for categorical and continuous variables. In the total sample, 11.4% ($n = 52$) of the boys and 14.6% ($n = 22$) of girls were identified as perpetrators of aggression toward a parent ($\chi^2[1, N = 606] = 1.04$, *ns*). Of those who engaged in parent-directed aggression, boys were significantly more likely than girls to beat their parent ($\chi^2[1, n = 74] = 4.01$, $p < .05$).

One might expect aggressive behaviors to change with age as the child develops. However, child age

was significantly related with only one type of aggression. Child age was negatively correlated with the presence of kicking (r [n = 74] = –.56), indicating that older children were less likely to kick their parents. No other sex or age differences were found in the type, frequency, severity, recipient, or motive for parent-directed aggression.

Comparison of Parent-Directed Aggressive with Nonaggressive Children

Child characteristics. We compared the 74 children who engaged in parent-directed aggression with the 532 children in our total sample who did not on a range of child, parent, and family characteristics as rated by both parents and teachers (Table 2). We expected aggressive children to be characterized by male sex, older age, more oppositional and aggressive behavior, and greater difficulties responding appropriately to stressors, as evidenced by more extreme scores on measures of frustration tolerance, child adaptability, and demandingness. The results generally confirmed these predictions. Although there were no age or sex differences, children who engaged in parent-directed aggression had a significantly greater level of generally aggressive behavior and a greater number of oppositional symptoms. In addition, such children were characterized by their parents and teachers as being more demanding and having a poorer capacity for adaptability and frustration tolerance. The effect sizes for all of these differences (reported as Cohen's d in Table 2) were in the small to medium range. It is notable that in the comparison of aggressive with all nonaggressive children, statistical power was adequate for detecting the small and medium effect sizes observed (power > .70 and .99, respectively). In addition, in support of the specificity of these findings, parent-directed aggressive children were no different from nonaggressive children on measures of

Table 2. *Comparison of Children Who Engaged in Parent-Directed Aggression and Those Who Did Not on Child, Parent, and Family Characteristics*

	PDA (n = 74)		Non-PDA (n = 532)		Statistic	Effect Size
Variable	M or n	SD or %	M or n	SD or %	t or χ^2	d or Φ
Child characteristics						
Child sex (male)	52	70.3	403	75.7	1.04	.04
Child age	8.3	2.8	8.7	3.1	1.26	.10
IAB–overt	80.3	19.1	73.0	21.2	2.80**	.23
IAB–covert	18.9	8.1	17.7	7.5	1.17	.10
RDI–oppositional	7.6	1.6	6.8	1.9	3.12**	.25
RDI–conduct	3.6	2.1	3.4	2.2	<1	.07
CBCL–externalizing, parent	71.0	8.0	69.0	8.1	1.90	.15
CBCL–externalizing, teacher	63.9	8.0	64.3	10.3	<1	.02
HRI–frustration tolerance	16.0	5.6	17.7	6.7	2.08*	.17
PSI–adaptability	34.0	6.4	30.6	6.3	4.28***	.35
PSI–demandingness	27.9	5.7	25.6	5.7	3.28***	.27
HRI–total, teacher	82.9	17.3	86.5	22.9	1.30	.05
Parent characteristics						
PSI–parent domain	140.0	32.6	132.6	28.1	2.06*	.17
BDI	10.2	8.9	9.0	7.7	1.23	.10
SCL–90	61.8	58.0	54.2	46.2	1.29	.10
CTS–parent to parent[a]	1.9	4.4	2.1	6.2	<1	.02
CTS–parent to child[b]	8.2	4.7	8.0	5.1	<1	.07
CAPI[c]	152.5	107.6	153.0	101.1	<1	.00
Family characteristics						
FES	5.5	5.8	7.0	5.2	2.30*	.19
Ethnicity						
European American	57	77.0	317	59.6	8.36**	.12
African American	6	8.1	161	30.2	16.00***	.16
Hispanic American	4	5.4	34	6.3	<1	.01
Other	7	9.5	20	3.8	5.00*	.09
Hollingshead class	3.5	1.1	3.0	1.2	3.37***	.27
Family income	5.4	2.6	4.3	2.5	3.47***	.28
Receiving public assistance	13	18.3	169	31.7	5.81*	.10
Single-parent family	25	33.7	290	54.5	11.18***	.14

Note: IAB = Interview for Antisocial Behavior; RDI = Research Diagnostic Interview; CBCL = Child Behavior Checklist; HRI = Health Resources Inventory; PSI = Parenting Stress Index; BDI = Beck Depression Inventory; SCL–90 = Symptom Checklist–90; CTS = Conflict Tactics Scale; CAPI = Child Abuse Potential Inventory; FES = Family Environment Scale.

[a] ns = 28 and 105. [b] ns = 40 and 172. [c] ns = 65 and 342.

*p < .05. **p < .01. ***p < .001.

conduct disorder symptoms, nonaggressive antisocial behaviors, general externalizing problems, or overall psychological functioning.

Parent and family characteristics. It was expected that parents of aggressive children would be characterized by more physical aggressive toward spouses and children, greater levels of parenting stress, and higher levels of depression and psychopathology. The results only partially confirmed these predictions. Parents of aggressive children reported significantly higher parenting stress than the parents of nonaggressive children; however, there were no differences between these two groups on measures of parent physical aggression, depressive symptoms, or overall symptoms of psychopathology.

We hypothesized that the family environment of aggressive children would be characterized by poorer interpersonal relationships. This was supported. The family environment of aggressive children was characterized by poorer interpersonal relationships compared with nonaggressive children. Prior research has suggested that families of children who are aggressive toward a parent are more likely to be characterized by being European American, intact families of higher socioeconomic status. Interestingly, our results were similar. Aggressive children were significantly more likely to come from a two-parent, European American family and to be of higher socioeconomic status. The effect sizes for these comparisons were in the small to medium range (reported as Cohen's d for t tests and ϕ for chi-square tests in Table 2).

Prediction of Parent-Directed Aggression

In addition to knowing that several of the child, parent, and family characteristics examined are associated with the presence of parent-directed aggression, it would be instructive to identify which factors were most predictive of such behavior and how well these factors actually perform at classifying children as aggressive or nonaggressive. Such an examination would provide information about the practical utility of these characteristics in identifying cases of potential aggressive behavior. In addition, we wanted to examine whether any of the observed differences between children engaging in parent-directed aggression and those who did not existed above and beyond the effects of overall oppositionality and aggression and thus could be considered more specific predictors of such behavior. Accordingly, the final goal of this study was to test the ability of the identified child, parent, and family characteristics to predict the presence of parent-directed aggression and to classify children according to these predictions. We entered the 12 variables (ethnic minority status was collapsed into one variable) that differed significantly between these two groups into a hierarchical logistic regression analysis using parent-directed aggression status (yes/no) as the dependent variable. Because it is possible that observed differences between aggressive and nonaggressive children are due to individual or demographic differences, we entered the five family demographic variables (ethnic minority status, socioeconomic class, income level, receipt of public assistance, and single-parent family status) together into the first step of the regression analysis using a forward entry procedure. To control for overall level of oppositionality and aggressiveness, we entered the two variables representing these constructs in the second step using forward entry. We entered the five remaining child, parent, and family characteristics (frustration tolerance, adaptability, demandingness, parent stress, and quality of interpersonal family relationships) together in the third step of the equation using a forward entry procedure. This allowed us to test whether the child, parent, and family characteristics entered in the third step are reliable predictors of parent-directed aggression status after controlling for the demographic variables entered in the first step and overall oppositionality and aggression in the second step.

As presented in Table 3, only family income entered the equation in the first step as a statistically re-

Table 3. *Hierarchical Logistic Regression Analysis of Parent-Directed Aggression Status as a Function of Child, Parent, and Family Characteristics*

Variables	β	*SE*	(Wald Test) z Ratio	Odds Ratio	95% CI for Odds Ratio	
					Lower	Upper
Step 1						
Family income	0.16	0.05	10.75***	1.18	1.07	1.30
Step 2						
RDI–oppositional	0.23	0.08	8.00**	1.26	1.07	1.48
Step 3						
PSI–adaptability	0.06	0.02	8.15**	1.07	1.02	1.11
HRI–frustration tolerance	–0.04	0.02	4.30*	0.96	0.92	1.00

Note: CI = confidence interval; SE = standard error; RDI = Research Diagnostic Interview; PSI = Parenting Stress Index; HRI = Health Resources Inventory.

*$p < .05$. **$p < .01$. ***$p < .001$.

liable predictor of parent-directed aggression status compared to a constant-only model (Step 1 $\chi^2[1, N = 606] = 10.75$, $p < .001$) and resulted in the correct classification of 49.3% of aggressive children and 68.6% of nonaggressive children, for an overall correct classification rate of 66.3%. In the second step, after controlling for the demographic characteristics listed previously, the number of oppositional defiant disorder symptoms endorsed entered the equation (Step 2 $\chi^2[1, N = 606] = 9.27$, $p < .01$) and resulted in the correct classification of a slightly higher percentage of aggressive children (57.7%), but a slightly lower percentage of nonaggressive children (65.7%), for an overall correct classification rate of 64.8%. In the third step, child adaptability and frustration tolerance were the only two variables to enter the equation as statistically reliable predictors of parent-directed aggression status (Step 3 $\chi^2[1, N = 606] = 4.57$, $p < .05$) and resulted in the correct classification of 67.6% of aggressive children and 68.6% of nonaggressive children, for an overall correct classification rate of 68.5%. Thus, these variables were predictive of parent-directed aggression even after controlling for demographic differences and overall level of oppositionality and aggressiveness.

Table 3 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for the four variables in the final equation. Using the Wald criterion, all four variables mentioned previously reliably predicted parent-directed aggression status. An interpretation of the odds ratios, which indicate the child's odds of being aggressive toward a parent given a one-unit increase in their score on each independent variable, is instructive. Although a one-unit increase in the measure of family income is associated with an odds ratio of 1.18 (an 18% increase in the likelihood of being aggressive), an increase of one standard deviation on this measure (representing a $1,000 increase in monthly family income) is associated with an odds ratio of 1.50 (a 50% increase in the likelihood of being aggressive). Similarly, although with each additional symptom of oppositional defiant disorder there is an odds ratio of 1.26 (a 26% increase in the likelihood of being aggressive), an increase of one standard deviation is associated with an odds ratio of 1.55 (a 55% increase in the likelihood of such behavior). Finally, although a one-unit increase in the measures of child adaptability and frustration tolerance are associated with odds ratios of only 1.07 and 0.96, an increase of one standard deviation on each measure is associated with odds ratios of 1.46 and 1.30 (a 46% and 30% increase in the likelihood of being aggressive, respectively). Thus, higher scores on measures of family income, oppositional defiant disorder, child adaptability to stressors, and frustration tolerance are associated with a reliable, increased risk of parent-directed aggression.

Discussion

The purpose of this study was to describe characteristics of youths who engaged in physical aggression toward a parent. The main findings were that (a) 12.2% of the children in this clinical sample engaged in such aggression, usually toward the mother; (b) the rates of aggression were no different as a function of child age, and although 70.3% of aggressive children were boys, this is no different from the percentage of boys in this sample of children referred for conduct problems; (c) aggressive children had a greater number of symptoms of oppositional defiant disorder and increased generally aggressive behavior; (d) they were also characterized by parents and teachers as having a poorer capacity to adapt to stressors and to tolerate frustration and by being more demanding of their parents; (e) parents of aggressive children experienced increased parenting stress; (f) parent-directed aggressive, compared to nonaggressive, children were more likely to come from two-parent, European American families of higher socioeconomic status and from families characterized by poorer interpersonal relationships; (g) overall, four of these characteristics (family income, oppositional defiant disorder symptoms, child adaptability, and frustration tolerance) were useful in reliably predicting parent-directed aggression status and correctly classified 68.5% of all children into one of these two groups; and (h) lower child adaptability and frustration tolerance were predictive of parent-directed aggression even after controlling for demographic variables and overall oppositionality and aggressiveness, suggesting that these characteristics are specifically associated with parent-directed aggression.

This study provided an operationalization of the concept of parent-directed aggression, as well as data describing the type, frequency, and severity of such behavior. Outside of the context of parent-directed aggression, other research has shown that boys are more likely to engage in physical aggression and girls in relational or verbal aggression (Crick, 1996, 1997). In our study, aggressive boys were significantly more likely than aggressive girls to beat a parent. However, the more consistent finding in this study is the absence of sex differences related to the frequency or severity of physical aggression toward a parent.

In addition, contrary to our expectations, the frequency and severity of parent-directed aggression did not increase with age in this study. In fact, the only age difference indicated that the presence of kicking behavior *decreased* with increasing child age. However, it is notable that we examined only children up to 14 years of age. Others have suggested that parent-directed aggression increases in frequency and severity only after children reach adolescence (Evans & Warren-Sohlberg, 1988).

Children who engaged in parent-directed aggression showed higher levels of oppositional and generally aggressive behavior than other children referred for conduct problems. It is possible that this difference was due to biased reporting by the parents who were the target of aggression, although the lack of differences on other measures of child dysfunction (e.g., CBCL, HRI) suggests that this was not the case. In addition, parent-directed aggressive children differed from other clinic-referred children on ratings of frustration tolerance, adaptability to stressful situations, and demandingness. These findings suggest that children who engage in physical aggression toward a parent have a specific deficit responding to difficult interpersonal situations appropriately (e.g., family conflict, peer conflict). It is notable that these differences were observed across different settings (i.e., at home and at school) and remained present even after controlling for demographic characteristics, as well as overall levels of oppositionality and aggressiveness that differed between the two groups, supporting the validity of this finding. These findings suggest that children engaging in parent-directed aggression do so in a reactive and impulsive (i.e., rather than proactive or callous and unemotional) fashion (cf. Dodge, 1991; Frick, 1998). However, it is notable that we did not assess the function of each incident directly or use measures to assess the potentially proactive or callous and unemotional nature of such behavior. Thus, the function of such behavior remains uncertain and represents an important direction for future research.

The parents of aggressive children reported significantly more parenting stress than other parents, and the family environment of aggressive children was characterized by poorer interpersonal relationships than other children. It is likely that the aggressive behavior performed by these children leads to increased parent stress levels and a more dysfunctional family environment. However, it is also possible that aggressive children's behavior is directly influenced by the behavior of their stressed parents and dysfunctional family environment (e.g., Dodge, Pettit, & Bates, 1994; Wahler, 1980) or that there is a reciprocal or transactional relation between these influences (Wahler & Dumas, 1986). Longitudinal studies examining such abuse are needed to tease apart the unfolding of these behaviors.

The finding that aggressive children were more likely to come from two-parent, European American families of higher socioeconomic status is consistent with some previous reports on such children (Charles, 1986; Paulson et al., 1990). At first blush, this finding is at odds with research indicating aggressive child behavior more generally is more likely to be associated socioeconomic disadvantage and its attendant characteristics (e.g., neighborhood violence, greater parent discord). Why such large discrepancies exist in ethnicity, socioeconomic status, and familial structure between children who do and do not engage in aggression toward a parent remains unclear. Previous research has suggested that lax, inconsistent, and overly permissive parenting styles are more likely to lead to problem behavior than "stricter" parenting styles and that European American families are less likely to use stricter parenting styles and physical punishment as a discipline strategy than are African American families (see McCloyd, Cauce, Takeuchi, & Wilson, 2000). Therefore, it is possible that the use of a more permissive parenting style by European American parents contributes to the ethnic and socioeconomic differences between children who do and do not engage in parent-directed aggression. However, such hypotheses wait further empirical testing.

Interestingly, there are several differences one might expect between children that did and did not engage in parent-directed aggression that did not emerge in this study. The rates and severity of such aggression did not differ for clinic-referred girls and boys. Moreover, there were no significant differences between groups in the level of physical aggression from parents directed toward their partners or children in the home. This is surprising, because many have hypothesized that factors such as child abuse are involved in the development of parent-directed aggression (e.g., Evans & Warren-Sohlberg, 1988; Straus et al., 1980). Similarly, there were no significant differences between parent-directed aggressive and nonaggressive children in the severity of parental psychopathology. Our results do not provide support for the view that parent psychopathology is related to parent-directed aggression. Needless to say, further work is needed on this point. This sample includes a high rate of dysfunction and stress if contrasted with parents of a community (nonreferred) sample.

Important limitations of this study deserve comment. The generality of the findings may be restricted, as the study was completed among clinically referred youths identified because of conduct problems. Thus, the family, parent, and child characteristics examined may only apply to similar samples. An important research priority would be to obtain a community-based, epidemiological sample to find prevalence rates of parent-directed aggression. Another limitation pertains to the use of therapists to assess parent-directed aggression and to have that assessment after the completion of treatment. For most cases, this assessment method relied on information obtained from parents, which did not allow for the direct assessment of the intent of each child's behavior and which may have been subject to reporting bias. Some parents may have been reluctant to report that their child was physically aggressive toward them. Such reporting biases are common to most studies of domestic violence and may have played a role in this study. In addition, the measures used to represent several of the constructs examined had internal consistency reliability

estimates that were moderate at best and in some cases were unexamined. Finally, this study addressed a narrow range of variables contributing to parent-directed aggression. Other factors that may play a role in the development and maintenance of this behavior were suggested in this study, such as specific parenting styles and different aspects of the child's environment, and these represent areas of future study.

Despite these limitations, this study provided an operationalization of parent-directed aggression, identified and described children who engaged in such behavior, and delineated characteristics that may be useful in the identification of such children in other studies and clinical settings. Several potential lines of research follow directly from the results of this study. First, the factors associated with parent-directed aggression status in this sample should be tested in other samples (both clinical and normative) of children and adolescents. Second, the identification of factors that explain the socioeconomic, ethnic, and familial structure that emerged will undoubtedly prove useful in the assessment and treatment of such children. Third, given the surprisingly high rate at which parent-directed aggression occurs, and the ability of this and other studies to identify characteristics associated with such behavior, future studies should aim at testing assessment and intervention approaches designed to reduce these aggressive behaviors. Finally, parent-directed aggression ought to be studied longitudinally. Early physical aggression of a parent could easily be a precursor to other types of violent acts.

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