

# Relational, Indirect, and Social Aggression: Alleviating Gender Bias In the Diagnosis of Conduct Disorder

J Klem, T Klem, M Parrish, D Brown

## Citation

J Klem, T Klem, M Parrish, D Brown. *Relational, Indirect, and Social Aggression: Alleviating Gender Bias In the Diagnosis of Conduct Disorder*. The Internet Journal of Mental Health. 2007 Volume 5 Number 2.

## Abstract

This literature review examines the potential for gender bias in the diagnosis of Conduct Disorder in conjunction with the concepts of indirect, relational, and social aggression. We will discuss a brief history of the changes in the diagnostic criteria, how those changes affected the diagnosis, and the effects of aggression in the diagnostic process. This review also provides an overview of indirect, relational, and social aggression in children and adolescents. Furthermore, we will consider relational aggression as a diagnostic criterion in Conduct Disorder and discuss how it may alleviate the possibility of gender bias in the diagnosis of Conduct Disorder.

## INTRODUCTION

Conduct disorder is one of three disruptive behavioral disorders for children and adolescents listed in the Diagnostic and Statistical Manual for Mental Disorders (DSM). The others, Attention Deficit Hyperactivity Disorder (ADHD) and Oppositional Defiant Disorder (ODD), all have some overlapping characteristics with Conduct Disorder (CD), but CD is by far the most severe of the disruptive behavioral disorders. Research has shown that CD is a debilitating illness with long-term consequences that affects both the individual and the community. In a review of 20 studies of CD among adolescent females, there were increased rates of mortality, with rates as high as 10% compared to 1.1% to 2.6% for the general population and a 10% to 40% increase in criminal behavior. Furthermore, there was a higher prevalence of psychiatric issues, poorer interpersonal relationships, lower academic achievement, inconsistent work histories, and higher use of social support networks among females diagnosed with CD (1). In addition to these outcomes, CD among adolescent females has a higher than normal percentage of comorbidity, which complicates treatment (2). These severe and long-term consequences, for both children and adolescents, underscore the importance of early diagnosis and treatment, especially in the grade school years (34).

Unfortunately, there are some concerns related to the diagnosis of CD, with a commonly mentioned issue related to gender (56). According to the DSM, the CD diagnosis is

intended to be gender-neutral, yet a number of researchers have noted significant concerns about the reliability of CD diagnosis among females (56). One prominent example is in the prevalence rates, as males receive the diagnosis two to four times more often than females (38). These differences present concerns that may be the result of gender bias within the diagnostic criteria. Furthermore, these differences may lead to a significant number of individuals not being diagnosed with the disorder and thereby not receiving the appropriate attention and intervention from mental health professionals. Stemming from this issue, this review will outline three aspects of the CD diagnosis. First, a brief overview of CD, including the definition, the DSM criteria and prevalence rates, will be presented. Second, a review of the literature on the possible gender bias in the CD diagnosis will be addressed. Finally, this paper will conclude with a discussion about some of the research on different types of aggression not currently listed in the CD criteria, and how this research may be beneficial to mental health professionals when assessing individuals for the CD diagnosis.

## CONDUCT DISORDER

The diagnosis of CD first appeared in the third edition of the DSM and has undergone two revisions (9). The first set of changes occurred in the revised third edition of the DSM (10) when several nonviolent anti-social behaviors were removed from the diagnostic criteria (11). The second set of modifications came in the fourth edition of the DSM (12)

which included the addition of new criteria: bullying, staying out late at night despite parental prohibitions, a modification of the lying criteria, and a change in the time periods in which the symptoms must be evident.

The current CD diagnosis is defined as a “repetitive and persistent pattern of behavior in which the basic rights of others and major age-appropriate societal norms or rules are violated” (p. 98) ( <sup>13</sup> ). The DSM-IV-TR currently lists four categories for the diagnosis of conduct disorder in children and adolescents: (1) aggression, (2) destruction of property, (3) lying or theft, (4) and serious violation of rules. Grouped under each of these four categories, the DSM outlines 15 specific behaviors used to diagnose CD. For example, the specific criteria listed under the aggression category include: “(1) often bullies, threatens, or intimidates others, (2) often initiates physical fights, (3) has used a weapon that can cause serious physical harm to others, (4) has been physically cruel to people, (5) has been physically cruel to animals, (6) has stolen while confronting a victim, (7) has forced someone into sexual activity.” (p. 98-99) ( <sup>13</sup> ) CD has also been differentiated into two subtypes: adolescent onset (age 11 and after) and childhood onset (before the age of 11). Finally, to receive a diagnosis of CD, an individual needs to manifest three of the 15 specific behaviors in the past 12 months and at least one behavior in the past six months ( <sup>13</sup> ).

The prevalence rates of CD vary widely. Currently, the DSM-IV-TR reports that prevalence rates range “from less than 1% of the population to more than 10%” (p. 97) ( <sup>13</sup> ). Other researchers have reported CD to be one of the most common reasons for referral ( <sup>14</sup> ), with some estimates putting the percentage of children with conduct disorder between the three to five percent range and these numbers can double in adolescence ( <sup>15</sup> ). In a comprehensive review of seven studies of over 10,000 children (5,212 males and 5,226 females, age 5-15) diagnosed with ODD and CD, it was indicated that CD is far more common in males (2.1%) than females (0.8%). This study also reported a steady increase in the rate of CD diagnosed males, while the level of diagnosis of CD among females remained low until around age 12 ( <sup>16</sup> ). This coincides with Moffitt and Caspi’s ( <sup>17</sup> ) male to female ratio of 10 to 1 for children diagnosed with CD, but only 1.5 to 1 (males to females) for adolescents diagnosed with CD.

Researchers have also discovered a later onset (with a mean onset age of 13) and less linear stability in the development

of anti-social behavior among females ( <sup>3</sup> ) as opposed to males who appear to develop anti-social behavior in a more linear fashion, around age seven ( <sup>818</sup> ). However, there is some evidence of early onset, stability, and different types of anti-social behavior among females. Côte, Zoccolillo, Tremblay, Nagin, and Vitaro ( <sup>19</sup> ) undertook a 10 year longitudinal study of disruptive behavior among females. Results indicated that females with a medium or high level of disruptive behavior between kindergarten and the sixth grade are over 4 times more likely to receive the diagnosis of CD than females in the non-disruptive groups. Another study found males and females to exhibit equal levels of conduct problems, especially when covert behavioral problems are considered conduct problems ( <sup>20</sup> ). Furthermore, this research brings to question if developmental issues need to be considered when assessing the prevalence of CD, as well as whether the gender difference in prevalence rates of CD in childhood and adolescence are actually different or a reflection of bias within the DSM criteria.

## **GENDER BIAS IN DIAGNOSIS**

The DSM criterion for CD is expected to be gender neutral; however, there are considerable differences in prevalence rates between males and females. One explanation for this may be that a gender bias exists within the CD diagnosis ( <sup>6</sup> ). Widiger and Spitzer ( <sup>21</sup> ) define bias as “a systematic deviation from an expected value” and a sex bias as “a systematic deviation that is associated with the sex of the subject” (p.3). McLaughlin ( <sup>22</sup> ) outlined three specific ways bias can influence a DSM diagnosis. The first is sampling bias (dealing with how the sample is chosen), the second is assessment bias (how clinical information is gathered), and finally criterion bias (when the criteria is more valid for one group than another is) ( <sup>22</sup> ). It is essential to explore how the literature addresses each of these types of biases when considering the possibility of gender bias in the CD diagnosis.

In examining assessment bias, it is important to consider who is reporting the problematic behavior. When assessing problematic behavior in children and adolescents, the referral generally comes from someone other than the patient. This is an important consideration as teachers and parents may more often focus on overt behavior which they find particularly troubling ( <sup>7</sup> ) and the referral sources may be completely unaware of hidden problems.

Sampling bias may also be a contributing factor to the possibility that gender bias may exist in the CD diagnosis.

Zoccolillo ( 6 ) outlines three areas in which this may become problematic. One way a sampling bias could have emerged comes from the belief that the CD diagnosis is so rare among females that research has had a tendency to over-emphasize the study of males or combine males and females into one population. Second, many of the subjects used in the research on CD come from the criminal justice system. This is problematic due to higher rates of arrest and imprisonment of males, which has unintentionally led many researchers to study only males diagnosed with CD. Third, females may be more likely to be found outside the settings of psychiatric system and may therefore be underrepresented in a clinical population ( 6 ).

With regard to criterion bias, Zoccolillo ( 6 ) points out that most of the studies used to validate the criteria for the diagnosis of CD were composed primarily of males, which he argues may have led to bias in the symptomology of the CD diagnosis. Based on this and other research, Zoccolillo ( 6 ) argues that the CD criteria or threshold for the diagnosis needs to be adjusted to more accurately reflect the behaviors of females.

One additional area worth noting is in the section on “Specific Cultural, Age, and Gender Features” for diagnosing CD in the DSM-IV-TR. In this section, it is suggested that males diagnosed with CD “frequently exhibit fighting, stealing, vandalism, and school discipline problems,” while females “exhibit lying, truancy, running away, substance abuse, and prostitution” (p. 97) ( 13 ). Using these behaviors as a guide, it would be more consistent for these behaviors, for both males and females, to be used as symptoms for the diagnosis. Winstead & Sanchez ( 23 ) noted that two specific behaviors outlined for females, substance abuse and prostitution, are not listed in the DSM as criteria for CD; whereas, all of the described behaviors for males are listed as criteria. Furthermore, this section lends some credence to Zoccolillo’s ( 6 ) premise that there are differing ways in which CD can be manifested and that gender has an influence on the symptoms of CD

Bias may have also been accentuated when the undersocialized, non-aggressive subtype found in the DSM-III was replaced by more severe forms of aggressive behavior found in the DSM-III-R and DSM-IV. Some researchers believe that the more severe forms of aggression found in the later versions of the DSM are more indicative of how CD presents itself in males ( 1424 ), while the more non-aggressive behaviors were associated with CD in females ( 25

).

In a more recent study of the gender sensitivity of the disruptive behavioral disorders, Ohan & Johnston ( 5 ) undertook two specific investigations to see how mothers would rate the gender appropriateness of the criteria for all three disruptive behavior disorders. Results support the idea that the current symptoms for CD are more indicative of a male pattern of anti-social behavior. Ohan & Johnston ( 5 ) also added an additional set of more “female sensitive items for CD” (p. 369). These items were centered on emotional blackmail and cruelty, social cruelty, leaving school with members of the opposite sex, and stealing non trivial items. These “female-sensitive” items were rated by mothers to be more indicative of a female behavior, but were not considered as problematic as the current criteria for CD. In their second study, Ohan and Johnston ( 5 ) attempted to link the “female sensitive items for CD” to the current diagnosis of CD. Results of this study were inconclusive for CD, but for both ADHD and ODD the researchers were able to find a link between the “female sensitive” items and the current ADHD and ODD constructs. Overall, these studies add an important piece to the puzzle on whether the current criterion for CD has a specific gender bias. It seems from these results that there may be a male bias in the current criterion for CD and that the inclusion of the more “female-sensitive” items may be able to alleviate some of the bias. Unfortunately, the researchers were not able to assess the degree of relatedness between the “female sensitive” CD items and the current DSM-IV symptoms for CD ( 5 ).

From this review, it appears there are number of ways in which bias, specifically gender bias, has impacted the CD diagnosis. From the sampling and criterion bias outlined by Zoccolillo ( 6 ), to the possible criterion bias pointed out by Winstead & Sanchez ( 23 ), there seems to be a pattern of using symptomology that is less indicative of disruptive behavior in females. While this research does not indicate that significant changes are needed in the DSM, it does point to the idea that mental health professionals need to have a firm grasp on the different ways disruptive behavior can manifest, especially among females. The next section of this review will outline some the current research on other ways that disruptive behaviors and specifically aggression can manifest.

## **RELATIONAL, INDIRECT, AND SOCIAL AGGRESSION**

Aggression has generally been defined as “intent to harm” (

<sup>2627</sup>) and has been found to be one of the best predictors of future antisocial behavior (<sup>282930</sup>). Unfortunately, there have been some limitations in the study of aggression with much of the past research on aggression focusing on the more overt forms of aggression, such as physical and verbal aggression (<sup>263132</sup>). Not unexpectedly, some researchers, including Ohan & Johnston (<sup>5</sup>), have suggested “the terms ‘physical violence’ and ‘aggression’ are often considered synonymous” (p.360). Additionally, this singular focus on physical aggression has inadvertently led to the study of aggression in males, who engage in physical aggression far more often than their female counterparts (<sup>3334</sup>). While it is true that females do engage in physical aggression, a much larger group of females have been shown to engage in less physical and more socially manipulative forms of aggression (<sup>35</sup>). Fortunately, researchers have begun to reverse the trend of primarily studying more overt aggression and have begun studying the subtypes of aggression where the aggressor may be less obvious and uses the social milieu to attack (<sup>2936</sup>). Furthermore, much of this research has found females to use these less obvious forms of aggression more often than males in both childhood and adolescence, but upon entering adulthood, these gender differences have been shown to diminish.

Research on these less obvious forms of aggression began in the early 1970’s, but it was not until Lagerspetz, Björkqvist, & Peltonen’s (<sup>37</sup>) article that an extensive research agenda was undertaken. Currently three differing forms of non-physical aggression have been identified in the literature. The first, indirect aggression, was defined “as a kind of social manipulation: the aggressor manipulates others in order to attack the victims, or, by other means, makes use of the social structure in order to harm the target person, without being personally involved in the attack” (p. 52) (<sup>38</sup>). The second, relational aggression, was first used in the Crick and Grotpeter (<sup>39</sup>) study of aggression in 8 to 12 year olds. Relational aggression was defined as “harming others through purposeful manipulation and damage of peer relationship” (p. 711) (<sup>39</sup>). Finally, a third subtype of aggression is social aggression. Social aggression was first identified in the Cairns, et al. (<sup>35</sup>) study of children in grades four to seven and more extensively investigated in Galen and Underwood’s (<sup>40</sup>) article on aggression. In that article, social aggression was defined as “behavior which is directed toward damaging another’s self-esteem, social status, or both, and may take such direct forms as verbal rejection, negative facial expressions or body movements, or

more indirect forms such as slanderous rumors or social exclusion” (p. 589) (<sup>40</sup>).

From these definitions, it becomes clear that relational, social, and indirect aggression all use the social milieu to harm another person; however, there are some subtle differences. For example, social aggression encompasses the use of negative body language and facial expressions (mean looks and gestures), whereas relational aggression does not (<sup>41</sup>). Furthermore, indirect aggression is entirely covert (as the intended target is completely unaware of the attacker), while relational aggression will employ some face to face attacks, such as threats to end the friendship if one does not do as they are asked. While these differences may seem insignificant, they have generated controversy in the literature and have led to the multiple avenues of research (<sup>42</sup>). However, despite the controversy, there is enough overlap between the constructs that many researchers believe that indirect, relational, and social aggression are generally describing the same construct (<sup>2641</sup>).

A number of developmental theories have been proposed to explain the development of indirect, relational, and social aggression. When Crick and Grotpeter (<sup>39</sup>) first investigated relational aggression they began with the premise that males and females would use the type of aggression that most damages the important social goals of their respective genders. For males, dominance is the key social goal (<sup>43</sup>), therefore using physical aggression can cause significant damage to social dominance. For females, intimacy is the prominent social goal in their relationships (<sup>43</sup>); consequently, relational aggression is used to undermine this intimacy. Björkqvist, Lagerspetz, & Kaukiainen (<sup>38</sup>) proposed that indirect aggression developed on a different track than physical aggression, as it requires the development of verbal skills and social intelligence. In addition, these researchers asserted that indirect aggression is a more sophisticated method of attack, as the victim is unaware of the attacker (<sup>38</sup>). This premise could have significant implications on whether the attacker’s behavior will come to the attention of parents and teachers and be used to formulate an accurate assessment of the individual.

## **RELATIONAL AGGRESSION AND CONDUCT DISORDER**

As stated earlier, the current CD diagnosis is defined as a “repetitive and persistent pattern of behavior in which the basic rights of others and major age-appropriate societal norms or rules are violated” (p. 98) (<sup>13</sup>). For relational

aggression to be considered within the context of this definition, it is important for the research to show that relational aggression is a “persistent pattern of behavior” and “violates the social norms and right of others.” With regard to the “persistent pattern of behavior” section of the definition, research has found evidence of relational, indirect, and social aggression in preschool ( 4445 ), at all grade levels in elementary school and high school ( 373839 ), in college students ( 46 ), and well into the life span ( 47 ). Additionally, a number of studies have found a steady increase in the use of relational aggression as females enter adolescence ( 48 ). Unfortunately, this review found only one study that examined the same individuals over a one year span. Their findings indicate that among preschool students (N=19), relational aggression is a stable behavioral pattern one year from the original measurement ( 50 ).

The question then becomes whether relational aggression is problematic enough to be considered disruptive behavior and “violates the social norms and right of others.” Similar to the study of frequency and gender differences, research has demonstrated significant links between engaging in and/or being the victim of indirect, relational, or social aggression and social/psychological issues and developmental problems ( 3239495152 ). For example, among preschool students the use of relational aggression was found to predict peer rejection 18 months later ( 53 ). Also, in a study of 4 [[th]] and 5 [[th]] grade students, victimization by relational aggression was linked to lower levels of peer acceptance, increased levels of peer rejection, submissive behavior, social avoidance, loneliness, emotional distress, lower levels of self-restraint, and social anxiety ( 49 ). In a study among adults, victimization by indirect aggression was correlated with higher levels of depression, anxiety, and aggressiveness ( 54 ). Other research has found significant links between the use of the relational aggression and psychosocial problems. In the Prinstein, Boergers, and Vernburg study ( 55 ), the use of relational aggression was linked to an increase in depressive symptoms, loneliness, and lower scores on a self-worth inventory. These researchers also found that individuals who were victims of both overt and relational aggression were the most susceptible to adjustment difficulties ( 55 ).

In addition, relational aggression has also been shown to be associated with other violent acts. In a study of violence of middle school and high school students, backbiting (unkind remarks) was found to be an important precursor to violence. Backbiting by the antagonist was followed by an accusation of wrongdoing by the respondent. The accusation then led to

a denial of wrongdoing by the antagonist. From these initial interactions, numerous verbal attempts were used to influence the outcome and finally violence was used to resolve the conflict ( 56 ). Although relational aggression was not specifically mentioned in this article, backbiting appears to fit with the overall theme of relational aggression ( 5657 ). Furthermore, there is a possible connection between bullying and relational aggression. Bullying has been defined as “a student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students” (p. 9) ( 58 ). Some specific actions of bullying include indirect methods, such as spreading rumors and intentionally excluding someone from a group ( 58 ).

## DISCUSSION

Will including the behaviors encompassed by relational, indirect, or social aggression in the criteria of CD improve the possible gender bias within the diagnosis? Using Ohan and Johnston’s ( 5 ) article as a guide, it would seem that adding relationally aggressive behavior could enhance the gender sensitivity of the CD symptoms. In addition, it could bring more awareness to school officials and mental health professionals of the detrimental consequences of relational aggression. As discussed in the bias section of the article, problems in childhood and adolescence is usually assessed by a parent, teacher, or counselor. It is crucial for these individuals to not only be familiar with the subtle nature of relational, social, and indirect aggression, but also be keenly aware of these constructs when assessing for it. This familiarity could be enhanced by adding relationally aggressive symptoms to the CD criteria.

Also, what about relational aggression in males? The research is clear that males engage in relational aggression ( 2959 ), but will relational aggression among males be looked at with the same level of seriousness as physical aggression? The research indicates that relational aggression can play an important role in escalation to physical aggression, so being aware of relationally aggressive behavior in both males and females could be a crucial step toward preventing physical aggression ( 56 ) and possibly early diagnosis for CD. In a study of 9 to 12 year old children who engaged in gender non-normative forms of aggression (physical aggression for girls and relational aggression with boys), Crick ( 36 ) found those individuals were at greater risk of “intolerance, rejection, and negativity from other children.” Crick asserts that this treatment could intensify the difficulties these children may already be encountering ( 36 ). This finding

underscores the urgent need of mental health professionals to assess for relationally aggressive behavior in males, as the research shows a possibility of even greater adjustment difficulties.

Several researchers have discussed reducing the number of criteria for the diagnosis of CD in females, recommending that the criteria for diagnosis be lowered from three to two (611). While this may be an appropriate suggestion, an alternate approach is to include gender-sensitive behaviors in the diagnosis of CD (6) as suggested by Ohan and Johnston (5). Presently, the diagnosis of CD has numerous criteria that are heavily weighted toward a male variant of the disorder (e.g., has forced someone into sexual activity). In order to alleviate gender bias that may exist in the CD diagnosis, it is the opinion of these authors that future revisions of the DSM should include specific behaviors that are more characteristic of females, such as relational aggression.

## IMPLICATIONS

While changes and clarification of any of the disorders listed in the DSM can take years to implement, there are some important implications in understanding disruptive behavioral disorders and relational aggression. First, clinicians in mental health settings should consider relational aggression as more serious than merely typical adolescent behavior. The research is clear that the negative impact of relational aggression is related to many of the same negative psychosocial issues as the more overt forms of aggression (39). This point, coupled with findings that relational aggression is as stable as the more overt forms of aggression, underscores the importance that clinicians may need to change how they perceive the different types of aggression as it pertains to diagnosing disruptive behavioral disorders. Failure to consider relational, indirect, or social aggression could lead mental health clinicians to overlook key aspects of a client's behavior, which may have a long term impact on their treatment. Secondly, in school settings, counselors need to assertively intervene when this type of behavior manifests. While some victims of relational aggression may be less sensitive to its influence, it is important to assess the impact for each person reporting. Finally, due to the covert nature of relational, social, and indirect aggression, when the behavior does come to the attention of counselors, teachers, or administrators, adequate steps must be taken to deal with both the aggressors and the victims.

CD can have a severe and lasting impact on both the

individual and society in general (3660). Early intervention and treatment are the best ways to deal with CD (60). Unfortunately, there are still many unanswered questions in the diagnosis of CD that require further investigation, specifically concerning gender bias in the diagnostic criteria. Finally, researchers need to continue to investigate the specific ways in which both males and females manifest anti-social behavior and how these forms of anti-social behavior could lead to the development of a gender-neutral diagnosis of CD.

## CORRESPONDENCE TO

John Klem, PhD 221 10th Avenue East Menomonie, WI 54751 e-mail: klemj@uwstout.edu

## References

1. Pajar K. What happens to "bad" girls? A review of the adult outcomes of antisocial adolescent girls. *Am J Psychiatry* 1998;155:862-869.
2. Loeber R, Keenan K. Interaction between conduct disorder and its comorbid conditions: effects of age and gender. *Clin Psychol Rev* 1994;14:497-523.
3. Atkins M, McKay M. DSM-IV diagnosis of conduct disorder and oppositional defiant disorder: implications and guidelines for school mental health teams. *School Psych Rev* 1996; 25:274-283.
4. Webster-Stratton C, Reid M, Hammond M. Treating children with early-onset conduct problems: Intervention outcome for parent, child, and teacher training. *J Clin Child Adolesc Psychol* 2004; 33:105-124.
5. Ohan J, Johnston, C. Gender appropriateness of symptom criteria for attention-deficit/hyperactivity disorder, oppositional defiant disorder, and conduct disorder. *Child Psychiatry Hum Dev* 2005;35:359-381.
6. Zoccolillo M. Gender and the development of Conduct Disorder. *Dev Psychopathol* 1993;5:65-78.
7. Hartung C, Widiger T. Gender differences in the diagnosis of mental disorders: conclusions and controversies of the DSM-IV. *Psychol Bull* 1998;3:260-278.
8. Kazdin A. Conduct disorder in childhood and adolescence (2nd ed.). 1995; Thousand Oaks, CA: Sage.
9. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (3rd ed.). 1980; Washington, DC: Author.
10. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (3rd ed., rev.). 1987; Washington, DC: Author.
11. Zoccolillo M, Tremblay R, Vitaro F. DSM-III-R and DSM-III criteria for Conduct Disorder in preadolescent females: specific but insensitive. *J Am Acad Child Adolesc Psychiatry* 1996;35:461-470.
12. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (4th ed.). 1994; Washington, DC: Author.
13. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (4th ed., text rev.). 2000; Washington, DC: Author.
14. Robins LN. Conduct Disorder. *J Child Psychol Psychiatry* 1991;30:193-212.
15. Werry JS. Severe conduct disorder: some key issues. *Can J Psychiatry* 1997;42:577-583.
16. Maughan B, Rowe, R, Messer, J, Goodman, R, Meltzer,

- H. Conduct disorder and oppositional defiant disorder in a national sample: developmental epidemiology. *J Child Psychol Psychiatry* 2004;45:609-621.
17. Moffitt TE, Caspi A. Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways among males and females. *Dev Psychopathol* 2001;13:355-375.
18. Clarizio HF. Conduct disorder: Developmental considerations. *Psychol Sch* 1997;34:253-265.
19. Côte S, Zoccolillo M, Tremblay RE, Nagin D, Vitaro F. Predicting females' conduct disorder in adolescence from childhood trajectories of disruptive behaviors. *J Am Acad Child Adolesc Psychiatry* 2001;40:678-684.
20. Tiet QQ, Wasserman GA, Loeber R, McReynolds LS, Miller LS. Developmental and gender differences in types of conduct problems. *J Child Fam Stud* 2001;10:181-187.
21. Widiger TA, Spitzer RL. Sex bias in the diagnosis of personality disorders: conceptual and methodological issues. *Clin Psychol Rev* 1991;11:1-22.
22. McLaughlin, J.E. Reducing diagnostic bias. *J Ment Health Couns*, 2002;24:256-269.
23. Winstead BA, Sanchez J. Gender and psychopathology. In Maddox JE, Winstead BA, (Eds.), *Psychopathology* (pp. 39-61). 1992; San Diego: Academic.
24. Moffitt TE, Caspi A, Dickson N, Silva P, Stanton W. Childhood-onset versus adolescent-onset antisocial conduct problems in males: natural history from ages 3 to 18. *Dev Psychopathol* 1996;8:399-424.
25. Kann RT, Hanna FJ. Disruptive behavior disorders in children and adolescents: how do females differ from males. *J Couns Dev* 2000;78:267-274.
26. Archer J, Coyne SM. An integrated review of indirect, relational, and social aggression. *Pers Soc Psychol Rev* 2005;9:212-230.
27. Harré R, & Lamb R. *The encyclopedia dictionary of psychology*. 1983; Great Britain: Basil Blackwell Publisher Limited.
28. Bor W, McGee TR, Fagen AA. Early risk factor for adolescent antisocial behavior: an Australian longitudinal study. *Aust N Z J Psychiatry* 2004;38:365-372.
29. Henington C, Hughes JN, Cavell TA, Thompson B. The role of relational aggression in identifying aggressive males and females. *J Sch Psychol* 1998;36:457-477.
30. Olweus D. Stability of aggressive reaction patterns in males: a review. *Psychol Bull* 1979;4:852-875.
31. Björkqvist, K. Sex differences in physical, verbal, and indirect aggression: a review of the recent research. *Sex Roles* 1994;30:177-198.
32. Leadbeater BJ, Boone EM, Sangster NA, Mathieson LC. Sex differences in the personal costs and benefits of relational and physical aggression in high school. *Aggress Behav* 2006;32:409-419.
33. Sumrall SG, Ray GE, Tidwell PS. Evaluation of relational aggression as a function of relationship type and conflict setting. *Aggress Behav* 2000;26:179-191.
34. Frodi A, Macaulay J, Thome PR. Are women always less aggressive than men? a review of the experimental literature. *Psychol Bull* 1997;84:634-660.
35. Cairns RB, Cairns, BD, Neckerman HJ, Ferguson LL, Gariépy J. Growth and aggression: childhood to early adolescence. *Dev Psychol* 1989;25:320-330.
36. Crick NR. Engagement in gender normative versus nonnormative forms of aggression: links to social-psychological adjustment. *Dev Psychol* 1997;33:610-617.
37. Lagerspetz KMJ, Björkqvist K, Peltonen T. Is indirect aggression typical of females? gender differences in aggressiveness in 11- to 12-year-old children. *Aggress Behav* 1988;14:403-414.
38. Björkqvist K, Lagerspetz KMJ, Kaukiainen A. The development of direct and indirect aggressive strategies in males and females. In K. Björkqvist & P. Niemela (Eds.), *Of mice and women: aspects of female aggression* (pp. 51-64). 1992; San Diego: Academic.
39. Crick NR, Grotpeter JK. Relational aggression, gender, and social-psychological adjustment. *Child Dev* 1995;66:710-722.
40. Galen BR, Underwood MK. A developmental investigation of social aggression among children. *Dev Psychol* 1997;33:589-600.
41. Coyne SM, Archer J, Eslea M. "We're not friends anymore! Unless..." The frequency and harmfulness of indirect, relational, and social aggression. *Aggress Behav* 2006;32:294-307.
42. Björkqvist K. Different name, same issue. *Soc Dev* 2001;10:272-274.
43. Block JH. Differential premises arising from differential socialization of the genders: some conjectures. *Child Dev* 1983;54:1335-1354.
44. Crick NR, Casas J F, Ku H. Relational and physical forms of peer victimization in preschool. *Dev Psychol* 1999;35: 376-385.
45. Crick NR, Casas JF, Mosher M. Relational and overt aggression in preschool. *Dev Psychol* 1997;33:579-588.
46. Storch EA, Bagner DM, Geffken GR, Baumeister AL. Association between overt and relational aggression and psychosocial adjustment in undergraduate college students. *Violence Vict* 2004;19:689-700.
47. Walker S, Richardson DS, Green LR. Aggression among older adults: the relationship of interaction networks and gender role to direct and indirect responses. *Aggress Behav* 2000;26:145-154.
48. Cairns RB, Cairns BD. *Lifelines and risks: pathway of youth in our time*. 1994; New York, NY: Cambridge.
49. Crick NR, Bigbee MA. Relational and overt forms of peer victimization: a multi informant approach. *J Consult Clin Psychol* 1998;30: 337-347.
50. Ostrov JM, Woods KE, Jansen EA, Casas JF, Crick NR. An observational study of delivered and received aggression, gender, and social-psychological adjustment in preschool: "This white crayon doesn't work...". *Early Child Res Q* 2004;19:355-371.
51. Crick NR, Nelson DA. Relational and physical victimization with friendships: nobody told me there'd be friends like these. *J Abnorm Child Psychol* 2002;30:599-607.
52. Crick NR, Ostrov JM, Burr JE, Cullerton-Sen C, Jansen-Yeh E, Ralston P. A longitudinal study of relational and physical aggression in preschool. *J Appl Dev Psychol* 2006;27:254-268.
53. Ostrov JM, Keating CF. Gender differences in preschool aggression during free play and structured interactions: An observational study. *Soc Dev* 2004;13:255-275.
54. Björkqvist K, Österman K, Hjelt-Bäck M. Aggression among university employees. *Aggress Behav* 1994;20:173-184.
55. Prinstein MJ, Boergers J, Vernberg EM. Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *J Clin Child Psychol* 2001;30:479-491.
56. Talbott E, Celinska D, Simpson J, Coe MG. "Somebody else making somebody else fight:" aggression and the social context among urban adolescent females, *Exceptionality* 2002;10:203-220.
57. Lockwood D. Violence among middle school and high school students: Analysis and implications for prevention. 1997; National Institute of Justice Research in Brief,

Department of Justice, Washington, DC: National Institute of Justice.

58. Olweus D. A profile of bullying at school. *Educ Leadersh* 2003;60:12-17.

59. David CF, Kistner JA. Do positive self-perceptions have a "Dark side"? Examination of the link between perceptual

bias and aggression. *J Abnorm Child Psychol* 2000;28:327-337.

60. Loeber R, Keenan K. Interaction between conduct disorder and its comorbid conditions: Effects of age and gender. *Clin Psychol Rev* 1994;14:497-523.

61. Werry JS. Severe conduct disorder: Some key issues. *Can J Psychiatry* 1997;42:577-583.



**Author Information**

**John L. Klem, Ph.D.**

Department of Rehabilitation and Counseling, University of Wisconsin-Stout

**Tonya Klem, BA**

School of Education, University of Wisconsin-Stout

**Mark S. Parrish, PhD, LPC**

Department of Counseling & Educational Psychology, University of West Georgia

**David R. Brown, PhD, LPC**

Department of Counseling & Family Studies, Cincinnati Christian University