

COMPARISON OF AGGRESSION IN BOYS AND GIRLS: A CASE FOR GENDER-SPECIFIC INTERVENTIONS

**Donald Meichenbaum, Ph.D.
Distinguished Professor Emeritus,
University of Waterloo
Waterloo, Ontario, Canada
and
Research Director of
The Melissa Institute for Violence Prevention and
Treatment
Miami, Florida**

*www.melissainstitute.org
www.teachsafeschools.org*

**University of Waterloo
Department of Psychology
Waterloo, Ontario
Canada N2L 3G1**

Phone: (519) 885-1211 ext. 2551
Email: dmeich@watarts.uwaterloo.ca

**Contact: (Oct. – May)
Donald Meichenbaum
215 Sand Key Estates Drive
Clearwater, FL 33767**

PROLOGUE

I spent one day a week as a therapist and consultant at a Juvenile Center for incarcerated female offenders over the course of eight years. I found this to be the most challenging and humbling psychotherapeutic work. The challenge may have been in part due to:

- (1) the high incidence of victimization and the likelihood of re-victimization that the girls experienced;
- (2) the high incidence of co-morbid disorders, including PTSD, depression and accompanying risk of self-injurious behavior and suicidality;
- (3) the girls' medical and neuropsychological complications;
- (4) the absence of the ability to provide follow-up interventions involving family members, and the limits of arranging for a supportive environment;
- (5) the challenge of being a male therapist working with female adolescent offenders who have not developed trusting relationships. (See Okamoto, 2002.)

I continue to collaborate with and train psychotherapists to work with aggressive adolescent females. It is therefore helpful to consider the developmental research on gender differences in aggressive behavior and the implications of these differences for how to tailor assessment, treatment and prevention to meet the needs of girls and female youth.

GENDER DIFFERENCES IN AGGRESSIVE BEHAVIORS

The idea that treatment for girls should be gender specific and that male treatments do not adequately address the unique needs of girls is well accepted in clinical circles. However, the pathways to adolescent antisocial behavior are not nearly as clearly understood for girls as they are for boys. (Chamberlain, 2003, p. 109)

Let us consider what we know about gender differences in aggressive behavior in terms of:

- a) differential incidence of antisocial and aggressive behaviors;
- b) expression of aggressive behaviors;
- c) developmental course and consequences;
- d) risk factors for girls developing aggressive behavior;
- e) implications for assessment, treatment and prevention;

The research findings to be reported have been gleaned from the following references; Artz (1998), Burtle (1998), Caspi et al. (1993), Chamberlain (2003), Chesney-Lind & Brown (1999), Capaldi et al (2004), Crick et al. (1998), Hoyt & Scherer (1998), Lederman & Brown (2000), Lenseen et al. (2000), Lescheid et al. (2001), Meichenbaum (2001), Moffitt et al. (2002), Pajer (1998), Pepler & Craig (1999), Pepler et al. (2006), Pepler & Sedigdeilam (1998), Putallaz & Bierman (2004), Tremblay et al. (1996), Trickett & Gordis (2004), and Underwood (2003.)

A) Differential Incidence of Antisocial and Aggressive Behaviors

- Adolescent boys commit the majority of violent crimes with a prevalence ratio in comparison to girls of from 3:1 to 12:1 depending upon the exact type of violent offense reported. The high male-to-female ratio diminishes from preadolescence to adolescence. Boys also have higher drug use than girls.
- While boys commit more antisocial crimes than girls, the rate of girls charged with violent crimes has increased twice as fast as boys. In recent years, female offenders are entering the juvenile justice system at a younger age and at a higher rate.
- Girls are more likely to be incarcerated for minor offenses. Status offenses (cases involving minors under the age of 17 who repeatedly refuse to obey parents, do not attend school or run away from home) account for about a quarter of all girl arrests, but for only 10% of boy arrests (run away, juvenile prostitution).

- In the U.S., almost three quarter of a million girls under 18 are arrested, accounting for 26% of the total juvenile arrests. Very few adolescent girls (1% - 2%) commit very serious or multiple offenses.
- 10% of adolescent girls manifest conduct disorders (CD), but very few girls with conduct disorders are violent offenders.
- Female adolescents who are involved in the Juvenile Justice system are not treated equally to their male counterparts. The Juvenile Justice system tends to either ignore girls or deal with them more harshly for less serious crimes than boys.
- Since most of the aggressive behavior of females is covert, females tend to be arrested more frequently for covert forms of delinquency (e.g., shoplifting and fraud) and for non-violent offenses (usually drug-related crimes). Girls who use drugs are also more likely to be involved in stealing, fighting and gang membership.
- Boys are four times more likely to appear in Juvenile Court than girls. Girls who are taken into custody for other than status offenses are likely to be more deviant than their male counterparts. Females have to reach a higher threshold before becoming involved in the juvenile justice system.
- Male to female ratio of antisocial behavior is higher for early (as compared to late) onset offenders. Boys and girls are more similar in the rate of aggression in urban schools than in rural schools.
- Girls and boys run away from home in about equal numbers. The more sexual abuse the youth experienced at home, the more likely he or she is to run away at a younger age.
- Girls are less likely to be referred to mental health and social services or to educational delivery services than boys are.

B) Expression of Aggressive Behaviors

- The topography of aggressive behavior, the specific contexts in which it occurs and the purposes of aggressive behavior differ for boys versus girls.
- While both boys and girls engage in relational aggression, girls tend to use more indirect, social and verbal forms of aggression. Examples of this include: social exclusion, collusion, gossiping, rumor spreading, character defamation, name-calling, ostracism, threatening to end valuable friendships, threatening to disclose personal information and mean-spirited teasing. This **relationship aggression** consists of efforts to harm others through manipulation or control of relationships

with others. Such relational forms of aggression are more common in **same sex peer groups**. Girls in early adolescence tend to be more verbally aggressive than girls in later adolescence. But the exact form of gender differences may vary across cultures. (***“Remember it takes two to fight, but three to gossip.”***)

- At all ages, girls tend to engage in less competitive, grabbing aggressive behaviors than boys. Friendships among highly relationally aggressive girls involve high levels of intimacy, jealousy and exclusivity. Girls shift to a more indirect form of aggression at the beginning of adolescence. Boys are more likely to express their aggression as an impulsive act.
- Girls are more likely than boys to use nonverbal signs of aggression such as disdainful facial expression, ignoring, and eye rolling.
- Females are less likely than males to engage in serious forms of violence. Boys carry weapons and engage in physical fighting at rates double that of girls. When girls carry a weapon they are more likely to get into a physical fight. Youth homicide rates and serious crime are overwhelmingly male. 92% of people in prison are males.
- Non-normative aggressive behaviors among girls (e.g., physical aggression) result in more severe maladjusted outcomes than normative aggression or nonaggression. Girls who fight and who engage in cruel behaviors (gender atypicality) are most likely to develop conduct disorder (CD). CD in girls is associated with developing Antisocial Personality Disorder (APD). Other adjustment problems may include co-morbid depression, anxiety and loneliness. Peer rejection is related to relational aggression. The relationship between rejection and aggression increases over time.
- Females are more likely to direct anger toward themselves rather than toward others. Such self-directed anger may be manifested in the form of self-injurious behaviors. As the level of suicidality increases, so does the frequency of violent externalizing behaviors. (***See Handout on Adolescent Suicide on www.melissainsitute.org.***)

C) Developmental Course and Consequences

- For both boys and girls, the rates of aggressive behavior peak around age 3. It is around age 4 that gender differences begin to emerge, as girls show greater responsiveness to socialization pressures and a marked decline in their aggressive behavior. Gender differences in aggressive behavior remain fairly robust through middle childhood, decreasing in late adolescence and adulthood.
- Beginning in early childhood, boys are more likely to engage in rough-and-tumble play; whereas girls typically play less physically and more so in dyads.

- Sex role prohibitions against physical aggression are stronger for girls. Physically aggressive girls are more disliked by peers than their male counterparts. For girls, aggression tends to be expressed in close relationships, rather than in the community at large.
- Boys tend to make up after a fight with another boy more quickly than girls do when they fight with other girls. Therefore, the conflict among boys is usually less disruptive of ongoing group activity than it is among girls.
- Boys who are slighted by other boys tend to shrug off such treatment. Girls are more likely to become upset when they are victims of relational aggression (slights, put downs, rolling of eyes, signs of social rejection).
- Girls are more likely to form close intimate friendships with a small subset of girls, typically one or two. These friendships are marked by sharing of confidences and self-disclosure, rather than their participating in group activities and group games. Girls are more likely to evidence a “rejection sensitivity.”
- Girls (even as infants) show evidence of more empathy than boys and stronger affiliative tendencies. Girls also show more guilt, remorse and prosocial behaviors. Girls are more likely to show evidence of what is called a “tend-and-befriend” response pattern, rather than a “fight or flight” behavioral pattern. Such female empathy provides a potential source of strength and resilience that can be harnessed in treatment.
- Parents, as well as teachers, tend to discourage physical aggression in girls and tolerate and encourage it in boys. Girls tend to withdraw from competitive situations more than boys.
- Girls tend to outgrow the tendency toward oppositional behavior at an earlier age than boys.
- When behavioral problems emerge they are initially similar for both boys and girls.
- Behavioral symptoms of early onset conduct problems for boys and girls are similar (e.g., high levels of noncompliance, oppositional, defiant and disruptive behaviors). Only physical aggression and destructive behaviors are more common in boys than in girls. Girls rarely show high rates of aggression in elementary school. This “gender gap” tends to close in adolescence.
- The stability of disruptive aggressive behavior tends to be as high in girls as it is in boys. The first signs of less serious behavior problems appear at similar ages for boys and girls.

- The age of onset of violent behavior is later for girls than for boys. Girls usually develop antisocial behavior mainly during adolescence rather than earlier.
- Between 4th and 7th grades, the drop off in physical aggression for girls occurs primarily in their conflicts with boys. Their conflicts with girls remain relatively low throughout this period.
- Girls diagnosed with ADHD are more likely to develop Conduct Disorders than boys with ADHD.
- Aggressive girls tend to have more academic difficulties and less school connectedness than non-aggressive girls.
- Self-confidence declines with age for girls more so than for boys, and they are more likely to have lower sense of self-efficacy.
- Aggressive girls tend to have more sibling conflict than boys.
- Aggressive girls are more attracted to aggressive boys than are non-aggressive girls, and they are more likely to engage in rough-and-tumble activities with boys.
- Bullying, especially physical forms of bullying, is more of a concern among boys than girls. Cross-gender aggression is higher for girls than for boys.
- Boys are more likely than girls to report bullying their peers at almost every grade level, but girls may not view their relational aggression as a form of bullying and thus underreport.
- Girls have been found to bully at a rate of 2.7 episodes per hour, compared to boys who bully at a rate of 5.2 episodes per hour.
- Girls tend to rely less on physical means of bullying and more on social forms of bullying, such as social exclusion and gossiping.
- Some episodes involving girls bullying boys appear to be attention-seeking in intent and may represent a form of precourtship behavior.
- Girls who bully report high rates of victimization including sexual harassment and date aggression. For girls, bullying behavior is related to increased alienation and conflict with lower levels of commitment in romantic relationships. Bullying in girls in middle and high school may set them up to select aggressive partners and put themselves at high-risk for aggression in romantic relationships.

- Rejected girls are more likely to be victims of bullying than average or popular girls. The most likely response to bullying is to attempt to fight back or to ignore the aggression. Rather than ending the conflict, research suggests that ignoring aggression often results in third parties entering the aggression cycle. The use of fighting back can lead to an escalation of aggression.
- Early maturing girls, with a history of behavior problems, are more likely to have more adjustment problems in adolescence than late maturing girls.
- Adolescent girls are more likely to have conflict with their mothers than with their fathers. Girls tend to have more conflicts with their parents than boys. Parental conflict, poor academic performance (often accompanied by learning difficulties), peer rejection by prosocial peers and affiliation with antisocial peers place aggressive girls on a trajectory of developing disruptive behaviors.
- Membership in an aggressive peer group in the 7th grade has been related to girls dropping out of school, which in turn is related to adolescent child bearing. For example, in a longitudinal study cited by Chamberlain (2003), peer nomination of grade 4 girls indicated that 11 years later, 50% of the aggressively nominated girls became mothers in comparison to 25% of non-aggressive girls. So called “controversial girls” – those who in the fourth grade were well liked by some peers and disliked by others because of their aggressive behavior – also had a 50% child bearing rate. Moreover, the aggressive and controversial girls gave birth earlier. Both groups tend to engage in antisocial and risk-taking behaviors, break rules and engage in early sexual activity.
- This developmental path is exacerbated by the use of substances. The developmental course of substance abuse appears to be different for boys and girls. There is a stronger link between early behavior problems and substance abuse among boys than girls. While boys tend to associate drug use with pleasurable effects; girls tend to link drug use with coping with stress and as a means of regulating emotions. As to be noted in the next Section on risk, incarcerated girls are more likely to have been victimized and suffer from PTSD. Women show a higher co-occurrence of PTSD and Substance Abuse Disorders than males.
- The earlier the age of delinquency onset, the more serious the form of delinquency in adolescence and in adulthood.
- The incidence of life-course persistent aggressive behavior in elementary and middle school may be as high as 10:1 for boys to girls, but at adolescence boys only outnumber girls 1.5 to 1. Girls start later, but catch up quickly.

- Girls with Conduct Disorder are more likely to engage in sexual activity earlier, with multiple partners, have a greater risk of sexually transmitted diseases and becoming teenage mothers. Adolescent motherhood has been associated with serious educational, relationship and financial problems.
- Girls with Conduct Disorder are also more likely to have parenting skills deficits and to raise children who will develop aggressive behavioral patterns.
- This developmental pattern in girls with Conduct Disorder is further complicated by the higher incidence of psychiatric symptoms such as depression and accompanying suicide attempts, phobias and obsessive compulsive disorders, eating disorders, PTSD and Borderline Personality Disorders.

In summary, girls who behave aggressively have multiple serious consequences as they enter adolescence and early adulthood, relative to girls without conduct disorders. They have:

- (1) Lower educational attainment and higher rates of school dropout;
- (2) Co-occurring psychiatric symptoms and substance dependence;
- (3) Higher incidence of antisocial personality disorders and criminality;
- (4) Higher incidence of being victimized in dating and romantic relationships;
- (5) Early pregnancy and poor parenting skills with an increased likelihood of rearing conduct disorder children;
- (6) Higher incidence of single parenthood and accompanying poverty;
- (7) Poor job histories and high welfare dependence; and
- (8) Increased mortality.

D) Risk Factors For Girls Developing Aggressive Behavior

The exposure to a variety of risk factors contributes to the likelihood that girls will develop aggressive and antisocial behaviors. These include:

- (1) **Parent and family factors**
- (2) **Victimization experiences**
- (3) **Behavioral factors**

In addition, we will consider the risk factors for offspring of mothers with conduct disorders.

1. Parent and Family Factors

- Female offenders, as compared to male offenders, have been found to experience more familial disruption and chaos (more multiple moves, as much as 4x greater likelihood of victimization, to have run away from home twice as often). Nationally, 70% of girls living on the streets runaway to flee violence in the home.
- Girls, as compared to boys, who are offenders have more out-of-home placement, more extremely chaotic and distressed families, high rates of instability, neglect and abuse, lack of parental guidance and parent criminality. In one study, 43% of girls placed in foster homes had mothers who had been convicted of a crime, as compared to 9.5% of boys' mothers. Seventy-five percent (75%) of the girls' fathers had been convicted of a crime versus 22% of the boys' fathers. Moreover, 24% of girls and only 3% of the boys had attempted suicide (Chamberlain, 2003).
- 95% of incarcerated girls lack a stable home life; 54% report mothers who had been arrested; 40% had fathers who had been arrested; 33% have a parent with a history of drug/alcohol abuse; 58% grow up in homes with one parent; 64% are likely to have had a psychiatric disorder in their lifetime (Lederman & Brown, 2000).
- Parental rejection, parental verbal and physical aggression, negative family communicating style by parents and low parental involvement are related to the daughter's aggression at home and with peers.

2. Victimization experiences

- Girls' law-violating behavior commonly relates to exposure to an abusive and traumatizing home life; whereas boys' law-violating behavior reflects their involvement in delinquent life-styles.
- 1 out of 4 violent girls has been sexually abused, compared to 1 in 10 of nonviolent girls.
- Trickett and Gordis (2004) highlight that whenever sexual abuse of girls is found, it is important to consider the characteristics of the sexual abuse when providing treatment. These characteristics include such factors as the relationship between the victim and perpetrator (e.g., father - daughter) that involve a betrayal of trust, an exploitation of love and dependency, the duration and frequency of the abuse, the presence of physical force and threats, and the presence of supports by the non offending parent. Of all the possible forms of abuse, the highest risk for the girls manifesting aggression is father-daughter abuse.
- 70% of girls in the juvenile justice system have a history of abuse (sexual, physical) versus 20% of females in the general population. 32% of boys in the juvenile justice system have been similarly victimized. Often girls run away

from home to escape such victimization. (*Note: Most maltreated children do not engage in antisocial delinquent behavior.*)

- More than half of girls (some 65%) who are incarcerated in a juvenile assessment center currently suffer from PTSD, as compared to the general female adolescent population of 11% and as compared to 20% of incarcerated boys (see Cauffman et al., 1998; Chesney-Lind & Belknap, 2004).
- Females are more likely to be raped or physically assaulted by partners. When such current instances of victimization repeat earlier victimization experiences it contributes to a high incidence of depression, suicidality, PTSD and Substance Abuse Disorders.
- Violent adolescent females are more likely to associate with and cohabit/marry antisocial aggressive partners. Not only are they likely to be victimized in such relationships, but as Capaldi et al. (2004) document, violent adolescent females are likely to initiate aggressive episodes.
- Half of violent episodes in intimate relationships involve men and women being mutually aggressive. Women have been found to initiate violence in intimate relationships. Conduct problems, aggressive behavior and substance abuse are predictive of physical aggression toward a partner in young adulthood for both men and women. Physical aggression toward a partner is highest at young ages and decreases with time.

3. Behavioral Factors

- Hormone changes in early maturing females may occur 2 to 3 years before anticipated. Such early maturing girls tend to interact with older and more deviant peers.
- Girls are 50% more likely to suffer from depression than boys.
- Girls, who are aggressive and also have learning problems, are most high risk of getting into trouble with the law.
- Half of incarcerated women were unemployed at the time of their arrest.
- Violent girls, as compared to matched control nonviolent females, are more likely to show evidence of severe levels of anger, higher risk-taking behaviors, suicide potential, dissociation, PTSD and substance abuse.
- Girls with higher levels of antisocial behavior are more likely to leave the family-of-origin home earlier, have multiple cohabitation partners and experience early childbearing.

**4. Risk factors for offspring of mothers with conduct disorders
(See Capaldi et al., 2004; Serbin et al., 2004; Zoccolillo et al., 2004.)**

- The offspring of mothers with conduct disorders are at high-risk in terms of prenatal health, the circumstances of the child's birth, the postnatal health of both the mother and infant, and the mother's parenting practices.
- Mothers with a history of conduct disorders are more likely to:
 - have children during teen years (A significant proportion of all adolescent mothers have conduct disorders.)
 - expose fetus to risk as a result of cigarette smoking, substance abuse, malnourishment, maternal stress and absence of regular medical check-ups.
 - be physically abused during pregnancy, and their offspring are more likely to be born preterm.
 - have close spacing of successive births (less than 2 years apart).
- Obstetric and delivery complications are elevated for girls with childhood histories of aggression, especially for those with a combined history of aggression and withdrawal/depression. They are more likely to have had a history of early and unprotected sexual activity, an increased incidence of sexually transmitted disease during adolescence and a variety of gynecological and other medical problems during adolescence (e.g. obesity, respiratory ailments, anemia, diabetes, and high blood pressure). They are also more likely to become pregnant before age 23.
- The earlier adolescent mothers have their first child, the more negative the effects will be on the mother. If mothers are 15 years or younger at the time that they give birth, they complete one-and-a-half fewer years of schooling than those who have children born in later adolescence.
- Children of adolescent mothers are at risk for negative outcomes. For example, in one study (Capaldi, 1991), mothers who gave birth to their first child by age 20 were twice as likely (35% vs. 18%) to have sons with arrest records by age 14. The daughters of mothers with chronic problems are also at risk. They are 3x more likely to experience early trauma than those whose mothers had no behavioral disorders. The daughters are often subjected to physical and sexual abuse by their mother's partners.
- The antisocial female tends to affiliate with antisocial men, be in violent abusive relationships, exhibit poor parenting skills (neglectful and self-absorbed), have a lower income and receive welfare.

- Women with histories of conduct disorders tend to choose antisocial mates.
- Mothers may be depressed and less sensitive and responsive to their infants leading to inadequate attachment relationships.
- Mothers are more likely to be irritated by normal infant behavior such as crying.
- Mothers provide infants with less cognitive stimulation contributing to lower IQ, academic failure and behavioral problems in their children.
- Biological fathers are more likely to be absent from the home or there may be a succession of antisocial male figures in the household. (The more antisocial the mother, the greater the chance the father will be missing.)
- Mothers are more likely to expose children to second hand smoking, family violence, substance abuse and poor nourishment (infant who shows evidence of poor weight gain).
- Mothers are more likely to use harsh and punitive parenting.
- All these factors contribute to the development of an insecure attachment, which is linked to the development of childhood aggression.
- The greater the presence of motherhood conduct disorder, the greater the probability of poor child outcomes.
- Teen parenthood is related to lower occupational status, lower income across the life course, and as a result their children experience all of the sequelae of poverty.
- Children of mothers with histories of conduct disorders are more likely to visit emergency rooms for treatment due to injuries, acute infections, asthma and bronchitis. The offspring also have poorer nutrition, less preventative health services and exposure to tobacco, alcohol and controlled substances.
- Mothers with conduct disorders continue to experience more stress and have less satisfactory social supports. They have a greater likelihood of early and single parenthood and poverty.

E) Implications for Assessment, Treatment and Prevention

Assessment Implications

The major concerns involve the need to:

- 1) screen early for all children who are at-risk for developing conduct disorders, but particularly be cognizant of the challenge of identifying potential conduct disorder girls in early screening;
- 2) systematically assess for all forms of bullying, including relational aggression;
- 3) assess for strengths and signs of resilience;
- 4) build-in assessment procedures to evaluate the effectiveness of any intervention programs. There is a need to conduct **Goal Attainment Scaling** to determine if the short-term, intermediate and long-term program objectives have been achieved. There is a need to solicit on a regular basis the girls' feedback and satisfaction concerning the program.

Each of these assessment issues and the accompanying intervention procedures are covered in detail in the forthcoming section on PREVENTING BULLYING, which can be found on The Melissa Institute Website for educators. Please see www.teachsafeschools.org.

1) Early Screening

As Berman et al. (2004) observe:

"Programs designed to identify at-risk girls for early preventive intervention should utilize broad screening strategies, which include both non-aggressive – disruptive and aggressive/disruptive behaviors as early risk indices. Due to the relatively low base rates of overt aggression among girls, a screening strategy that recognizes the risk associated with oppositional and inattentive – hyperactive behaviors, even when these are not accompanied by aggressive behaviors is particularly important in order to avoid the under identification of at-risk girls." (p. 153)

- Girls who are temperamentally overactive as toddlers and as preschoolers may be at risk. Girls, who show evidence of oppositional – defiant (high noncompliance rates) and attentional difficulties in addition to early aggression, are most at-risk for developing conduct disorders, having peer problems, and developing antisocial behavior.

- 2) There is a need to assess for bullying behavior including relational aggression in both girls and boys (e.g., social exclusion, ridicule, gossiping). Relational aggression, if left unaddressed, can lead to serious consequences.
- 3) Assess for strengths and signs of resilience in girls who show evidence of aggressive behavior (e.g., abilities, interests, future orientation, possible positive female role models, attachment history). Conduct disorder girls, who have a positive future orientation with potentially achievable goals, have been found to show evidence of more responsiveness to treatment and a more favorable prognosis (Chamberlain, 2004).
- 4) Patton and Morgan (2002) in their description of Gender Specific Services provide the following list of risk and protective factors that females may experience.

RISK FACTORS FOR FEMALES

Individual/Family	School/Community
Physical, emotional, and sexual abuse	Economic depression
Parental neglect	Urban underclass
Alcohol, tobacco and, other drug abuse	Classism
Sexually activity and/or early pregnancy	Racism
A learning disability	Lack of adequate housing/homelessness
Runaway/homelessness	School drop-out
Prostitution	Lack of school to work/college preparation
Criminal activity	Limited in/alternative school resources
Negative peer relationships/isolation	Academic failure
Gang involvement	Lack of social activities
Sex-offenses	Lack of health care
Peer engagement in antisocial behavior	
Low self-esteem	
Depression/suicidal tendencies	
Family violence	
Parental substance abuse	
Foster care placement	
Family criminal activity	
School dropout/truancy/suspension	

PROTECTIVE FACTORS FOR FEMALES

Individual/Family	School/Community
Positive self-concept	Extracurricular/community activities
Positive gender identification	Social supports
Good social skills	Caring school climate
Competence/sense of purpose	Values youth
Spirituality	Safe places to grow
Positive ethnic identity formation	Mentoring/caring
Connections to family	Physical/Mental Health care access
Nurturing family/effective communication	Drug/alcohol education/treatment
Positive relationships with peers'	Vocational/non-traditional job training
Healthy/thriving	College/higher education supports
Bonding to school	Low crime rate

- 5) Conduct **collaborative Goal Attainment Scaling** (see Meichenbaum, 2001).

Treatment Implications

Treatment of girls with conduct disorders needs to be multifaceted addressing such issues as the need to:

- a) develop a therapeutic alliance with the referred child/adolescent and her family (See Bertolino, 2003). Any therapeutic program with girls needs to attend to the girls' focus on relationships and the importance of one-on-one time. Patton and Morgan (2002) highlight the importance of ensuring that girls receive single-gender programming. They observe that if girls are included in a co-ed treatment program that the group dynamic changes. Girls tend to participate less and receive less staff time and support. There is a need to ensure continuity of care and solicit the girls' participation in program development and implementation;
- b) teach emotion-regulation, cognitive and social skills (See Conduct Problems Prevention Research Groups, 2002; Larson, 2005; Pepler et al. 2004). Patton and Morgan (2002) propose that Anger Control Programs with females should be labeled "Finding Your Voice" programs in order to help girls find positive ways to express their feelings and not inadvertently reinforce girls' tendencies to internalize failure;
- c) tailor interventions to the particular needs of girls (See Pepler et al. 2004; Walsh et al. 2002, Oregon gender-responsive programming,
<http://www.ocjc.state.or.us/JCP/JCPGenderSpecific.htm>)

- d) assess and address for co-morbid psychiatric disorders in girls with a history of aggressive behavior such as depression, suicidality, PTSD and substance abuse (See Offord & Boyle, 1996; Walsh et al., 2002). For example, it is essential to consider the role of depression when assessing and treating girls who exhibit behavioral problems. Depression usually follows the onset of conduct disorders in girls. The severity of the depression, if untreated, increases as girls enter adulthood. Depression in the girl's parents further complicates the clinical picture and compromises treatment. It is also critical to attend to the incidence and impact of victimization experiences (childhood physical and sexual abuse) in contributing to heightened suicidality in girls with conduct disorders. For example, Glowinski et al. (2001) interviewed over 3000 female adolescent twins and found that childhood abuse was a key factor associated with a suicide attempt history. In short, girls who evidence comorbidity disorders, compared to those girls who evidence only externalizing disorders, have a more chronic and complicating prognosis and are less responsive to treatments (See Clarkin & Kendall, 1992; Shea et al., 1992; Walsh et al., 2002). Since a life-time history of aggression differentiates adolescent suicide victims from matched controls, see Brent et al. (1994), Meichenbaum (2001), and the Section on Adolescent Suicide on www.melissainstitute.org;
- e) teach skills that build on girls' existing strengths and nurture resilience (Henderson & Milstein, 2003; Windle, 1992; Wolin & Wolin, 1993; and ways to nurture resilience on www.melissainstitute.org). See Covington (1999) and Kivel (1998) for programs that are designed to help girls build self-awareness and recover;
- f) help girls find a "hook for change" that fosters prosocial identities such as: exposure to prosocial peers, use of female mentors who act as same sex role models, becoming involved with religious faith and developing a socially supportive prosocial network. (See discussion of how to use spirituality in therapy on www.melissainstitute.org);
- g) create a treatment environment that supports and values females. Have books, magazines, films, activities that honor women. For example, see National Women's History Project (www.nwhp.org). Examine in groups such topics as how the media depicts women; the difference between being a "victim", a "survivor" and a "thriver"; the concept of "harassment", "inner beauty", the need to find and maintain healthy relationships and avoid revictimization; how to "feel and be safe";
- h) discuss the impact of school dropout, teen pregnancy, unemployment and provide opportunities for further education, for obtaining a high school degree, developing job-skills and engaging in career planning;
- i) provide adequate supervision in order to help structure the girl's time;

- j) address health-related needs concerning femininity and sexuality (e.g., menstruation, vulnerability to sexually transmitted diseases, contraception, family planning, child rearing and mate selection);
- k) have the girls draw a genogram and track the intergenerational cycle of violence, if it occurred, and learn ways to avoid re-victimization (See Najavits' Seeking Safety Program www.seekingsafety.org);
- l) help girls develop interpersonal skills (e.g., conflict resolution, communication, problem solving skills, empathy and relationship building, perspective-taking skills);
- m) address issues of gender-identity – “rites of passage” activities. Ask the girls what they need to do and what types of relationships do they need to pursue in order to “help them to become the women they want to be.” Help girls become engaged in some form of community involvement or caring relationships (See Patton & Morgan, 2002);
- n) address issue of treatment generalization and transfer (e.g., provide follow-through case management, ongoing supervision, obtain client satisfaction measures, put client in a “consultative mode” so she can describe or teach skills to others). Ask girls how they felt they did in training, what skills they learned, and how might they use these skills in their lives. (*See www.teachsafeschools.org for guidelines to follow to increase the likelihood of generalization.*)
- o) involve significant others in providing gender-specific interventions. An example of such an intervention was offered by an exemplary teacher of middle-school behaviorally disruptive girls. As she noted:

“In my all girls’ classes, I work to gain the girls’ confidence by being a good and respectful listener, by attending to their emotional needs before teaching them lessons, by being available even outside of class, and by not telling them what to do, but rather telling them what they need to know in order to become the women they want to be.” (USA Today, March 21, 2006).

Possible Preventative Programs with Females who are at High-Risk for Developing Aggressive Behaviors and Conduct Disorders

(See Underwood, 2003 and Underwood and Coie, 2004 for a more complete discussion of these programs.)

- On a preventative basis, screen at preschool and early school years for at-risk girls (girls who are noncompliant, overactive, inattentive, who have difficulty making transitions, difficulty forming peer relationships and difficulty regulating emotions). Such girls may show evidence of aggressive behavior and engage in high levels of rough-and-tumble play, especially with boys.
- Provide interventions at the preschool level and engage in ongoing monitoring of such programs.
 - Help girls improve their social skills in elementary school.
 - Provide girls with an opportunity to encounter prosocial peers (e.g. engage in team sports).
- Use best practices which are designed to help antisocial girls foster positive self-esteem, develop positive body image, teach empowerment skills, foster interpersonal relationships, and address parent-adolescent conflict. A promising gender-specific program for girls has been developed at the Earlscourt Child and Family Center in Toronto, Ontario by Kathryn Levene and her colleagues (see Levene, 1997; Levene et al., 2001; Walsh et al., 2002). They provided girls from ages 8 to 12 with weekly group treatment sessions. They developed treatment manuals to teach self-regulation skills (Stop-Now-And-Plan) and interpersonal skills (Girls Growing Up Healthy). These sessions were supplemented with mother-daughter groups, mentoring, specialized tutoring, and where indicated, treatment of the girls' comorbid disorders, conduct disorders, and depression including the treatment of the mother's depression. The Earlscourt Program can be supplemented by other best-practices interventions. (*See OJJDP, 1998, Kempf-Leonard & Sample, 2000, Robin & Foster, 1989.*)
- Bolster protective factors; foster educational attainment; nurture strengths and school connectedness; develop prosocial peer contacts; introduce mentoring programs with an adult female model (Big Sister-programs) (*See www.melissainstitute.org for a discussion of mentoring programs and also see Dubois & Karcher, 2005.*)

- Provide gender-specific interventions especially during adolescence in order to address such issues as: girls' relational aggression, propensity for affiliating with antisocial males who are less educated and who tend to be abusive, risk-taking behaviors and sexual decision-making, impact of victimization and ways to avoid re-victimization (safety-based interventions), and issues of parenting skillfulness so they do not have offspring who will develop behavioral and health problems. (*See Najavits, Seeking Safety Program, www.seekingsafety.org.*)
- Provide birth-control education and devices to female preteens and teens who are at-risk for early sexual activity.
- Help females stay in school and nurture a future planning orientation and development of employment skills. This is a critical intervention since childhood aggression has been linked with poor school motivation, premature school leaving and drug use in both boys and girls. However, truancy and running away are particularly problematic for girls with an aggressive history.
- With high-risk expectant mothers, intervene prenatally (e.g. substance abuse, smoking, nourishment, stress management and regular medical checkups).
- Foster parenting skills using nurse home-visiting programs to:
 - a) Provide basic training in hygiene, care of young children, childproofing homes, nutrition and household management.
 - b) Help mothers cope with distressing behavior (improve mother's sensitivity, responsiveness and teach them to learn ways to control their own level of irritability and stress).
 - c) Educate mothers about normal child development and the need to provide cognitive stimulation, especially on how to develop their children's vocabulary skills and school readiness skills. (*See www.teachsafeschools.org on ways parents can read stories to their children to enhance vocabulary development.*)
 - d) Educate mothers on ways to nurture a secure attachment mother-child relationship. Highlight the importance of physical touch as a means of helping infants learn to regulate emotional arousal and moderate affect. See Orbach (2006) for a discussion of the critical role of maternal proximity, sensitivity and responsiveness in nurturing attachment, emotional regulation and social understanding. Cavell (2000) has described how parents can be taught how to use parallel play as a means to develop affective and cognitive skills.

- e) Train parents on ways to respond to child noncompliance and disruptiveness. Combat reciprocal, coercive, interactive cycles with their children. Teach them to use soothing and emotional labeling skills with their children.
-
- Provide affordable childcare and supports for parents.
 - Teach anger-control skills, relationship enhancing and conflict-resolution skills to reduce the likelihood of domestic conflicts and violence.
 - Address clinical issues by providing help with co-occurring psychiatric problems such as depression, PTSD, substance abuse. Provide mental health and social services.
 - Foster employment skills and the development of stable relationships.

In addition to this list of preventative interactions, Underwood and Coie (2004) provide the following suggestions of possible strategies that can be used to help girls to become less aggressive:

- a) Provide girls with multiple opportunities to belong so they may have less intense needs to confirm their own acceptance by excluding others.
- b) Engage girls in more structured activities so they have less time for gossip.
- c) Help girls to become more comfortable with appropriate competition.
- d) Engage girls in social-cognitive interventions to help them make fewer hostile attributions in relationally provoking situations and help develop assertiveness skills.
- e) Harness girls' distaste for social aggression and nurture their empathy.
- f) Teach girls to actively defend and befriend peer victims (*See Bystander Intervention programs on www.teachsafeschools.org - Bully Prevention*).
- g) Teach girls to interrupt malicious gossip by immediately challenging negative evaluation statements.
- h) Teach girls ways to deescalate acts of aggression by learning ways to change their behavior, compromise, defend themselves, and use self-deprecating humor.
- i) Teach girls ways to form positive relationships and manage their emotions.

Underwood and Coie (2004) also highlight that under certain circumstances girls' and women's aggression may be adaptive as a form of self-defense, as a means to maintain group affiliation. Aggressive behavior may serve self-protective functions in addressing identity issues, and serve as attempts to self-regulate other emotions such as depression and anxiety.

In conclusion, girls who display aggressive behavior at an early age are prone to experience major difficulties throughout their lives. The likelihood of becoming serious violent offenders is increased if the girls have been maltreated and victimized, enter puberty early, have learning problems, a depressed mood, associate with antisocial peers, and partner with antisocial males. In addition, such girls with a history of aggression are likely to experience a number of clinical problems including PTSD and substance abuse. They are likely to engage in a number of risk-taking behaviors including early sexual activity, unprotected sex and becoming teenage mothers for which they are inadequately prepared, demonstrating poor parenting skills. This contributes to their children being at high risk for developing externalizing problems and a greater risk for their children to be victimized. Thus, the cycle continues!

Finally, while a case may be made for gender-specific interventions for aggressive and conduct disorder children and adolescents, there is a need to recognize the commonalities of effective intervention for both males and females, as summarized in the reviews of Carr (2000), Cavell (2000), Dannemiller (2003), Feindler and Ecton (1986), Kazdin (2000), Kazdin and Nock (2003), Larson (2005), Lockwood (1997), Meichenbaum (2001), Prout and Brown (1999), Shinn et al. (2002), Walker et al. (2004), and Weiss et al. (1995).

REFERENCES

- Artz, S. (1998). Sex, power and the violent school girl. Toronto: Trifolium Books.
- Bertolino, B., (2003). Change-oriented therapy with adolescents and young adults. New York: W.W. Norton.
- Brent, P. A., Johnson, B. A. et al. (1994). Personality disorder, personality traits, impulsive violence and completed suicide in adolescents. Journal of American Academy of Child and Adolescent Psychiatry, 33, 1080-1086.
- Burgle, V. (1985). Therapeutic anger in women. In Rosewater and L. Walker (Eds.). Handbook of feminist therapy: Women's issues in psychotherapy. New York: Springer Publishing.
- Capaldi, D.M., Kim, H.K., & Shortt, J.W. (2004). Women's involvement in aggression in young adult romantic relationships. In M. Putallaz and K.L. Bierman (Eds.), Aggression, antisocial behavior and violence among girls. (pp. 223-241) New York: Guilford Press.
- Carr, A. (Ed.) (2000). What works with children and adolescents: A critical review of psychological interventions with children, adolescents and their families. London: Routledge.
- Caspi, A., Lynam, D., Moffitt, T., & Silva, P. (1993). Unraveling girl's delinquency: Biological, dispositional and contextual contributions to adolescent misbehaviors. Developmental Psychology, 29, 19-30.
- Cauffman, E., Feldman, S.S., Waterman, J. & Steiner, H. (1998). Posttraumatic stress disorder among juvenile offenders. Journal of the American Academy of Child and Adolescent Psychiatry, 31, 1209-1216.
- Cavell, T.A. (2000). Working with parents of aggressive children. Washington, DC: American Psychological Association.
- Chamberlain, P. (2003). Treating chronic juvenile offenders. Washington, DD: American Psychological Association.
- Chesney-Lind, M. & Belknap, J. (2004). Trends in delinquent girls' aggression and violent behavior: A review of the evidence. In M. Putallaz and K.L. Bierman (Eds.), Aggression antisocial behavior and violence among girls. (pp. 203-220). New York: Guilford Press
- Chesney-Lind, M., & Brown, M. (1999). Girls and violence. In D. Flannery and R. Huff (Eds.), Youth violence: Prevention, interventions and policies. Washington, DC: American Psychological Association.
- Clarkin, J. E., & Kendall, P. C. (1992). Comorbidity and treatment planning: Summary and future directions. Journal of Consulting and Clinical Psychology, 60, 904-908.
- Conduct Problems Prevention Group (2002). Evaluation of the first three years of the Fast Track prevention trial with children at high risk for adolescent conduct problems. Journal of Abnormal Child Psychology, 30, 19-35.
- Covington, S. (1999). A woman's journal: Helping women recover. Jossey-Bass Books.
- Crick, N.R., Werner, N.E. et al. (1999). Childhood aggression and gender: A new look at an old problem. In D. Bernatein (Eds), Gender and motivation: Vol. 45 of the Nebraska Symposium in Motivation. (pp. 75-141). Lincoln: University of Nebraska Press.

- Dannemiller, J. L. (Ed.). (2003). Violent children [Special Issue]. Developmental Psychology, 39, (2).
- Dubois, D.L. & Karcher, M.J. (Eds.) (2005). Handbook of youth mentoring. Thousand Oaks, CA: Sage Publications.
- Feindler, E. L., & Ecton, R. B. (1986). Adolescent anger-control: Cognitive-behavioral techniques. New York: Allyn & Bacon.
- Fonagy, P., Target, M., Cottrell, D., Phillips, J., & Kurtz, Z. (2002). What works for whom? A critical review of treatments for children and adolescents. New York: Guilford.
- Glowinski, A. L., Bucholz, K. K., et al. (2001). Suicide attempts in an adolescent female twin sample. Journal of American Academy of Child and Adolescent Psychiatry, 40, 1300-1307.
- Henderson, N. & Milstein, M. M. (2003). Resiliency in schools: Making it happen for students and educators. Thousand Oaks, CA: Corwin Press.
- Hoyt, S. & Scherer, G. (1998). Female juvenile delinquency: Misunderstood by the juvenile justice system, neglected by social science. Law and Human behavior, 22, 81-107.
- Kazdin, A. E. (2000). Psychotherapy for children and adolescents: Directions for research and practice. New York: Oxford University Press.
- Kazdin, A. E., & Nock, M. K. (2003). Delineating mechanisms of change in child and adolescent therapy: Methodological and research recommendations. Journal of Child Psychology and Psychiatry, 44, 1116-1129.
- Kempf-Leonard, K. & Sample, L.L. (2000). Disparity based on sex: Is gender-specific treatment warranted? Justice Quarterly, 17, 89-128.
- Kivel, P. (1998). Young women's lives: Building self-awareness to life. Hazeldon Education Publishers.
- Larson, J., (2005). Think first addressing aggressive behavior in secondary schools. New York: Guilford Press.
- Larson, J., & Lochman, J. E., (2002). Helping children cope with anger: A cognitive behavioral intervention. New York: Guilford Press.
- Lederman, C.S., & Brown, E. N. (2000). Entangled in the shadows: Girls in the juvenile justice system. Buffalo Law Review, 48, 908-925.
- Lenseen, V., Darelejers, T. et al. (2000). Girls in detention: What are the characteristics? Journal of Adolescence, 23, 287-303.
- Lescheid, A.W., Cummings, et al. (2001). Aggression in adolescent girls: Implications for policy, prevention and treatment. Canadian Psychology, 42, 200-215.
- Levene, K. S. (1997). The EarlsCourt Girl Connection: A model intervention. Canada's Children, 4, 14-17.
- Levene, K. S. (2002). SNAP: Stop Now and Plan Children's' Group Manual. Toronto: EarlsCourt Child and Family Center.
- Levene, K. S., Augimeri, I. K Pepler, D. J. et al. (2001). Early Assessment: Risk List for Girls EARL-21G Version I. Toronto: EarlsCourt Child and Family Center.
- Lockwood, D. (1997). Violence among high school and middle school students: Analysis and implications for prevention. (NCJ Publication No. 166363). Washington, DC: U.S. Department of Justice.

- Meichenbaum, D. (2001). Treatment of individuals with anger-control problems and aggressive behaviors. Clearwater, FL: Institute Press.
- Moffitt, T.E., Caspi, A., Rutter, M. & Silva, P.A. (2002). Sex differences in antisocial behavior, conduct disorder, and violence in the Dunedin Longitudinal Study. Cambridge, UK: Cambridge University Press.
- Office of Juvenile Justice and Delinquency Prevention (OJJDP). (1998). Guiding principles for promoting female programming: An inventory of best practices. Washington, DC: Author.
- Offord, D., & Boyle, M. (1996). Standardized Client Information System. Toronto: Ontario Association of Children's Mental Health Center.
- Okamoto, S.K. (2002). The challenges of male practitioners working with female youth clients. Child and Youth Care Forum, 31, 257-268.
- Olds, D., Anderson, C.R. et al. (1998). Long-term effects of nurse home visitation in children's criminal and antisocial behavior. Journal of American Medical Association, 280, 1238-1244.
- Orbach, I. (2006). The body-mind of the suicidal person. In T. Ellis (Ed.), Cognition and suicide: Theory, research and therapy. (pp. 193-214). Washington, DC: American Psychological Association.
- Pajer, K.A. (1998). What happens to bad girls? A review of adult outcomes of antisocial adolescent girls. American Journal of Psychiatry, 155, 862-870.
- Patton, P., & Morgan, M. (2002). How to implement Oregon's Guidelines for Effective Gender-responsiveness programming for girls. (Available from Gender-Specific Services Consultant, 830 NE Holladay, Suite 125, Portland, OR 97232 rspatton@ix.netcom.com)
- Pepler, D. & Craig, W. (1999). Aggressive girls: Self and peer perceptions. Toronto, ON: York University.
- Pepler, J., Madsen, K., Webster, C. & Levene, K. (Eds.) (2006). The development and treatment of girlhood aggression. Mahwah, NJ: Erlbaum.
- Pepler, D., & Sedigdeilami, F. (1998). Aggressive girls in Canada. (Government Document W-98-30E Applied Research Branch Strategic Policy Human Resources Development Canada.)
- Prout, H. T. & Brown, D. T. (Ed.) (1999). Counseling and psychotherapy with children and adolescents: Theory and practice for school and clinical settings. New York: Wiley.
- Putallaz, M. & Bierman, K.L. (2004). Aggression, antisocial behavior and violence among girls. New York: Guilford Press.
- Robin, A.R. & Foster, S.L. (1989). Negotiating parent-adolescent conflict: A behavioral-family systems approach. New York: Guilford Press.
- Serbin, L., Stack, D.M. et al. (2004). When aggressive girls become mothers. In M. Putallaz and K.L. Bierman (Eds.), Aggression, antisocial behavior and violence among girls. (pp. 262- 285). New York: Guilford Press.
- Shea, M. T., Widiger, T., & Klein, M. (1992). Comorbidity of personality disorder and depression: Implications for treatment. Journal of Consulting and Clinical Psychology, 60, 897-868.

- Shinn, M. A., Walker, H. M., & Stoner, G. (Eds.). (2002). Interventions for academic and behavior problems: Preventive and remedial approaches. Bethesda, M.D: National Association of School Psychologists.
- Tremblay, R., Bouliere, B. et al. (1996). Do children in Canada become more aggressive as they approach adolescence? Growing up in Canada: National Longitudinal Survey of Children and Youth. Ottawa, ON: Human Resources Development Canada.
- Trickett, P.K. & Gordis, E.B. 92004). Aggression and antisocial behavior in sexually abused females. In M. Putallaz and K.L. Bierman (Eds.), Aggression, antisocial behavior and violence among girls. (pp. 162-185). New York: Guilford Press.
- Underwood, M.K., & Coie, J.D. (2004). Future directions and priorities for prevention and intervention. In M. Putallaz and K.L. Bierman (Eds.), Aggression, antisocial behavior and violence among girls. (pp. 289-311). New York: Guilford Press.
- Underwood, M.K., (2003). Social aggression among girls. New York: Guilford Press.
- Wackschley, L.S., & Hans, S.L. (2000). Early parenthood in context: Implications for development and intervention. In C. Zeanah (Eds.), Handbook of infant mental health. (2nd ed., pp. 129-144). New York: Guilford Press.
- Walker, H. M., Ramsey, E., & Gresham, F. M. (2004). Antisocial behavior in school: Evidence based practices. (2nd Ed.) Belmont, CA: Wadsworth/Thomson Learning.
- Walsh, M. M., Pepler, D. J., & Levene, K. S. (2002). A model intervention for girls with disruptive behavior problems: The Earlscourt Girls Connection. Canadian Journal of Counseling, 36, 397-310
- Weiss, J. R., Weiss, B., Han, S. S. Granger, D. A., & Martin, T. (1995). Effects of psychotherapy with children and adolescents revisited: A meta-analysis of treatment outcome studies. Psychological Bulletin, 117, 450-468.
- Windle, M. (1992). A longitudinal study of stress buffering for adolescent problem behaviors. Developmental Psychology, 28, 522-530.
- Wolin, S. J. & Wolin, S. (1993). The resilient self: How survivors of families rise above adversity. New York: Villard.
- Zoccolillo, M. Paquette, D. Azar, R., Cote, S. & Tremblay, R. (2004). Parenting as an important outcome of conduct disorder girls. In M. Putallaz and K.L. Bierman (Eds.), Aggression, antisocial behavior and violence among girls. (pp. 242-261). New York: Guilford Press.

WEBSITES

How to Implement Oregon's Guidelines for Effective Gender-Responsive Programming
for Girls

http://www.ocjc.state.or.us/JCP/JCPGenderSpecific.htm

Pepler, D. J. & Sedighdeclami, F. (1998).

Aggressive Girls in Canada

http://www.hrsdc.gc.ca/en/cs/sp/sdc/pkrf/publications/research/1998-000127/page01.shtml

Najavits, L., Seeking safety Program

www.seekingsafety.org