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Development of the Juvenile Justice Anger Management Treatment for Girls

Naomi E. S. Goldstein, Jennifer M. Serico, Christina L. Riggs Romaine, Amanda D. Zelechowski, Rachel Kalbeitzer, Kathleen Kemp, and Christy Lane
Drexel University

Abstract

Female juvenile offenders exhibit high levels of anger, relational aggression, and physical aggression, but the population has long been ignored in research and practice. No anger management treatments have been developed specifically for this population, and no established anger management treatments are empirically supported for use with delinquent girls. Thus, to alleviate anger and reduce the frequency and severity of aggressive behaviors in this underserved population, we developed the gender-specific, Juvenile Justice Anger Management (JJAM) Treatment for Girls. This cognitive-behavioral intervention was adapted from the Coping Power Program (Lochman & Wells, 2002), a school-based anger management treatment for younger children that has established efficacy and effectiveness findings with its target populations. This paper describes how the content of JJAM was developed to meet the unique needs of adolescent girls in residential juvenile justice placements. It also traces the process of developing a manualized treatment and the steps taken to enhance efficacy and clinical utility. An overview of the treatment, a session-by-session outline, an example session activity, and an example homework assignment are provided. A randomized controlled trial is currently being conducted to evaluate the efficacy of the JJAM Treatment for Girls.

Keywords

female juvenile offenders; anger management; intervention; juvenile justice; aggression

Juvenile offenders display high levels of anger and aggression when compared to their non-delinquent peers (Sukhodolsky & Ruchkin, 2004), and youth who display these characteristics often have other adjustment problems (Borduin & Schaeffer, 1998; Tarolla, Wagner, Rabinowitz, & Tubman, 2002). Aggression has been identified as the strongest predictor of social adjustment problems in children (Crick & Grotpeter, 1995; Crick, Ostrov,

Address correspondence to Naomi E. S. Goldstein, Ph.D., Department of Psychology, Drexel University, MS 626, 1505 Race Street, Philadelphia, PA, 19102; neg23@drexel.edu.
Christina L. Riggs Romaine is now at Essex County Juvenile Court. Amanda D. Zelechowski is now at the Department of Psychology, Valparaiso University. Rachel Kalbeitzer is now at the Nebraska Department of Correctional Services. Kathleen Kemp is now at the Institute of Law, Psychiatry, and Public Policy, University of Virginia.

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& Werner, 2006), and anger and aggression are linked to negative outcomes, such as truancy, substance use, destruction of important relationships, violence, and delinquency—problems that can continue into adulthood (Borduin & Schaeffer; Kokko & Pulkkinen, 2000). These negative outcomes highlight the need for effective anger management and aggression reduction interventions for juvenile offenders. In addition to the clinical need, there also is a legal need for anger management treatment for this population. Juvenile offenders are frequently mandated to complete anger management treatments as part of their dispositions from juvenile court (Lane, Lanza-Kaduce, Frazier, & Bishop, 2002). Despite the clinical and legal importance of having an effective anger management treatment available, few empirically supported treatments exist for juvenile offenders (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2008).

Studies examining gender differences in anger among adults from community and clinical samples have shown somewhat contradictory results; some studies revealed no differences (e.g., Archer, 2004; Campbell & Muncer, 2008), yet others identified differences in the causes and expression of anger (e.g., Fischer & Evers, 2011; Kassinove, Sukhodolsky, Tsytarev, & Solovyova, 1997). For example, women were more likely than men to express anger in the home and to report being angered by someone they loved (Kassinove et al., 1997). Findings from studies on gender differences in youths' anger also appear to be somewhat mixed (Zeman & Garber, 1996), although some gender discrepancies have been identified, such as findings that middle school-aged girls experience concurrent anger and depression more often than do boys (DeCoster & Zito, 2010).

There also appear to be important gender differences in the expression of aggression among juvenile offenders. Although some studies have found that boys display higher levels of aggression than girls, others have suggested that, when both physical and relational aggressions are considered, girls may demonstrate similar levels of aggression as boys (Moretti & Odgers, 2002). Relational aggression, which is a type of aggression that damages or threatens to damage relationships or social standing (e.g., spreading rumors, excluding someone from a group, giving someone the silent treatment), is often understood as a gender-specific form of aggression, with higher rates seen among girls than boys (Crick & Grotpeter, 1995). Female juvenile offenders display significant amounts of both physical and relational aggression, behaviors that are related to concurrent and future internalizing and externalizing problems in girls (Crick & Grotpeter; Crick et al., 2006). Gender differences in aggression have been noted in both the expression of aggression (i.e., physical v. relational) and development of aggression (Loeber & Stouthamer-Loeber, 1998). Further, girls are more likely than boys to act aggressively in the home (Zahn et al., 2008) and against friends and family members (Loper, 2000).

Juvenile offenders who are placed in residential juvenile justice facilities are typically housed with other youth of the same gender, and research suggests important differences between male and female offenders that have implications for their treatment (Calhoun, 2001). Gender-specific data on the prevalence of anger and aggression among juvenile offenders revealed that 54% of girls in a juvenile justice sample reported substantial problems with anger (Grisso & Barnum, 2000). Further, a significant proportion of the offenses for which female youths are arrested are associated with anger and anger-related

behaviors, such as physical and relational aggression (Snyder, 2002), highlighting the need for anger management and aggression reduction treatment for female juvenile offenders. However, to our knowledge, no empirically supported treatments exist for girls in residential juvenile justice placements.

In response to the clinical and legal need for anger management and aggression reduction treatments, the authors developed the Juvenile Justice Anger Management (JJAM) Treatment for Girls. JJAM is an empirically based, gender-specific, manualized treatment that was developed to meet the unique needs of adolescent girls housed in residential juvenile justice facilities. In this paper, we describe the development of the JJAM treatment content and discuss the ways in which we tailored the treatment to the specific needs of this population. We then review the process of developing the JJAM treatment manual, which began with an initial adaptation of Lochman and Wells's (2002) Coping Power Program¹ (CPP) and is culminating in an ongoing randomized controlled trial (RCT) of the JJAM treatment. Although RCT results are not yet available, this paper describes the steps involved in developing a manualized treatment that is clinically sensitive to individual clients' needs and, simultaneously, seeks to ensure the broad clinical utility and fidelity of the intervention.

Development of JJAM Treatment Content

To address the clinical and legal needs of female juvenile offenders, we emphasized a variety of factors in JJAM that are specific and relevant to the population. Lochman and Wells's (2002) CPP was an appropriate starting framework for an anger management treatment for female juvenile offenders because (a) the CPP reflects the literature on childhood aggression; (b) session activities, homework assignments, and interactive teaching techniques are designed to facilitate skill acquisition; and (c) the CPP has been studied and found effective with other populations (Goldstein, Dovidio, Kalbeitzer, Weil, & Strachan, 2007). The CPP is a multicomponent intervention designed for pre- and early-adolescent youth with anger and aggressive behavior problems and has been found efficacious at reducing aggressive behaviors in boys, ages 8 to 15 (e.g., Lochman & Curry, 1986; Lochman, Lampron, Gemmer, Harris, & Wyckoff, 1989; Lochman & Wells, 2003).

In creating JJAM, we included gender-specific adaptations to the CPP, including expanded instruction on relational aggression and skill-building in the areas of developing, strengthening, and repairing relationships. JJAM also included adaptations to the CPP so that the treatment would be developmentally and culturally appropriate for adolescent girls in the justice system. In addition, facilitator techniques were added to manage behavioral problems and to increase positive participation. Finally, we designed the treatment to accommodate the settings in which JJAM is intended to be delivered, namely, residential juvenile justice facilities.

¹Adaptations actually were made to the Anger Coping Program (Lochman, FitzGerald, & Whidby, 1999), an earlier version of the CPP. However, for consistency and ease of communication, the treatment name, CPP, is used throughout this paper.

Conceptual Model of JJAM

When managing anger, individuals must regulate emotions to reduce arousal. Aggressive children demonstrate social information processing (SIP) deficits in encoding, attributions, social goal setting, accurate outcome expectations, solution generation, decision making, and enacting behavioral solutions (Crick & Dodge, 1994). When anger-producing stimuli generate arousal, children may focus on perceived threats and impulsively respond with physical or relational aggression, believing that their behaviors will lead to positive results (Lochman et al., 1999). Many successful anger management interventions (e.g., Goldstein, Glick, & Gibbs, 1998; Kusché & Greenberg, 1995; Webster-Stratton, Reid, & Hammond, 2004), including the CPP, aim to prevent the negative effects of anger, particularly aggressive behaviors, by teaching cognitive and behavioral techniques to reduce arousal and enhance SIP skills (Crick & Dodge, 1994). Consistent with the established approaches and the unique needs of delinquent girls, JJAM retained the key mechanisms of action included in the CPP program: emotional regulation, cognitive restructuring of hostile attributions, and social problem-solving skills.

Given the emphasis on identified mechanisms of action, we expected that delinquent girls' participation in JJAM would improve their emotion regulation and social problem-solving skills and reduce hostile attribution biases. These cognitive and behavioral improvements should, in turn, result in less anger and aggression, which should be associated with lower rates of recidivism, as well. In addition, because many of JJAM's central components mirror those of effective treatments for oppositional-defiant disorder, conduct disorder, anxiety, and depression (e.g., Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998; Suveg, & Zeman, 2004; Zeman, Shipman, & Suveg, 2002), we expected to see reductions in externalizing and internalizing symptoms as core anger and aggression symptoms decrease (Burke, Loeber, & Birmaher, 2004). See Figure 1 for the theoretical model underlying JJAM.

Generally, the role of anger in aggression has been considered strong for youth and adults (Novaco, 1997). However, the relationship between anger and aggression has been debated in recent years, particularly for adult offenders. Few studies have been conducted on anger management interventions with adults in the criminal justice system, and those extant studies have produced mixed treatment outcome results (Dowden, Blanchette, & Serin, 1999; Watt & Howells, 1999). These findings have led to discussions of the impact of treatment readiness and levels of anger on treatment outcomes (Howells et al., 2005). Anger management treatments with adult offenders may not be effective because, unlike juvenile offenders (Goldstein et al., 2007), adult inmates may not display high levels of anger at pretreatment (Heseltine, Howells, & Day, 2010). Such differences between adolescent and adult offenders' levels of anger and aggression may explain differences in treatment responsiveness and overall treatment outcomes.

In contrast to the mixed results with adult offenders, research has suggested that anger management treatment may prevent aggressive behaviors among adolescents (Nelson, Finch, & Ghee, 2006), diminish the probability of negative consequences (Lochman, Powell, Whidby, & Fitzgerald, 2006), and reduce the high rates of recidivism typical in this population (Goldstein, Nensen, Daleflod, & Kalt, 2004; Kazdin, 1987). Although anger

management treatment may reduce aggressive behaviors, the role of anger in the expression of aggression remains somewhat unclear, and it is likely that not all aggression (e.g., instrumental aggression) arises from feelings of anger. However, given that juvenile offenders are often court-mandated to anger management treatment, and evidence suggests that anger frequently mediates aggressive reactions among juvenile offenders (e.g., Cornell, Peterson, & Richards, 1999), the treatment of anger to reduce aggression represents an area worthy of clinical and empirical attention.

JJAM Content Specific to Female Juvenile Offenders

Instruction on Relational Aggression—One important adaptation when creating the JJAM manual was to incorporate specific instruction on relational aggression. This focus was of particular importance because, in addition to exhibiting physical aggression, girls frequently manifest anger through relational aggression (Crick & Grotpeter, 1995). Emphasis was placed on helping participants understand that relationally aggressive acts (e.g., excluding others, spreading rumors, giving the silent treatment) may have some of the same negative consequences as physically aggressive acts, as well as unique consequences, such as loss of friendships, loss of support during physical fights, and damage to family relationships. The direct relationship between physical and relational aggression also was addressed in this context. JJAM specifies that many of the coping strategies that are employed to prevent physical aggression should be used when girls feel the “urge” to be relationally aggressive. In addition to entire sessions focused on relational aggression, we incorporated relational aggression examples into all relevant activities and discussions throughout the manual.

Skills to Repair Damaged Relationships and to Initiate and Strengthen

Positive Relationships—Girls’ aggression tends to be associated with conflictual interpersonal relationships. Girls are more likely than boys to commit crimes against friends or family members (Loper, 2000; OJJDP, 2008), and damaged relationships cause more distress for girls (Gavin & Furman, 1989). In addition, girls’ violence more often occurs at home, while boys’ violence more often occurs away from home (Zahn et al., 2008), a pattern that also may be related to girls’ greater tendencies toward relational aggression (Murray-Close, Ostrov, & Crick, 2007). Furthermore, when compared to boys with similar problems, girls with disruptive behavior disorders experience more peer rejection due to poorer social functioning (Carlson, Tamm, & Gauh, 1997; Cohen, 1989).

To address these gender-specific issues, JJAM incorporates sessions on strengthening and repairing damaged relationships. During treatment, girls are asked to consider how their previous aggressive acts damaged valued relationships. They are encouraged to take specific steps towards healing some of these strained relationships, including writing formal apology letters to people they may have hurt in the past. Throughout the sessions, participants are encouraged to take responsibility for their actions by recognizing the impact of their behaviors on others, as well as on themselves. In addition, we added the teaching of adaptive social skills (e.g., learning to initiate conversations, showing positive regard for others, being a good friend, appropriately expressing dissatisfaction with others’ behavior) to help participants establish and maintain positive peer relationships. Further, because girls’

aggression often occurs in the home, JJAM provides numerous opportunities to discuss anger-producing situations in the home and to practice reactions to these situations through role-play activities. Group participants are encouraged, throughout every session, to provide examples of their anger and aggression within and outside of the residential juvenile justice facilities, and the topic of aggression in the home is particularly salient during sessions and activities that focus on relationships. An activity is included to help youth inform family and closest friends about the skills that they learn during JJAM in order to promote the generalization of skill use to the home environment.

Developmental Appropriateness—Interventions demonstrate better outcomes when designed to address the developmental stage of their target populations (Dusenbury, Falco, Lake, Brannigan, & Bosworth, 1997), and, therefore, the JJAM treatment manual was adapted to meet the developmental needs of female juvenile offenders in residential placements. The CPP was designed for boys, ages 8 through 12, so most teaching materials and activities in JJAM were developed to reflect situations likely to be encountered by teenage girls. JJAM needed to directly and thoroughly address a number of topic areas relevant to adolescent females, including coping with romantic breakups; managing jealousy; dealing with social status threatened by other girls; and improving contentious relationships with teachers, parents, and facility staff members. JJAM was designed for delinquent girls ages 12 to 19, and the manual provides flexibility to allow facilitators to generate examples of situations appropriate to the developmental level of a specific group's members. Throughout the manual, JJAM encourages group leaders to use, as examples, the real-life, anger-provoking situations described by participants.

Cultural Sensitivity—Ethnic minorities are overrepresented in the juvenile justice system (Piquero, 2008). In addition, many juvenile justice youth experience poverty and are unable to access basic resources, such as adequate housing, health care, nutrition, and education (McKinnon, 2003). With this absence of basic needs fulfillment, many juvenile justice youths have developed mistrust of authority figures and adults in helping professions, something that has been cited as a major barrier to effective treatment (Huang et al., 2005). To address this issue, JJAM was developed to help group leaders build strong, therapeutic relationships with adolescent clients from a variety of cultures and backgrounds. Group leaders are taught to use appropriate self-disclosure to build rapport and facilitate communication within treatment groups (Sue & Sue, 1999); educate youth about facilitators' roles, participants' roles, and the therapeutic process; emphasize and maintain confidentiality; and address and acknowledge cultural differences and tensions.

Comorbid Mental Health Symptoms—To address the high rates of comorbid mental health symptoms in female juvenile offenders (Teplin, Abram, McClellan, Dulcan, & Mericle, 2002), JJAM draws from traditional cognitive-behavioral therapy (CBT) approaches and uses techniques such as cognitive restructuring and problem solving. The intervention increases the emphasis on reducing negative approaches to emotion regulation (e.g., catastrophizing, self-blame) and decreases the emphasis on positive emotional appraisals (e.g., positive refocusing). This shift in emphasis was due to JJAM's prioritization of accurate appraisals in the cognitive restructuring and social problem-solving processes.

Because of the high prevalence of traumatic histories (Hennessey, Ford, Mahoney, Ko, & Siegfried, 2004), unpleasant juvenile justice placements (Sedlak & McPherson, 2010), and obstacles to successful futures (Clinkinbeard & Zohra, 2011), delinquent girls' accurate appraisal processes need to reflect difficult and painful realities. It can be difficult to distinguish automatic thoughts that represent distortions of reality from those that reflect realistic appraisals of truly negative realities. When participants express these realistic appraisals, JJAM emphasizes acceptance of negative realities and challenges unrealistic, optimistic reframing approaches. Girls are encouraged to prepare for negative realities and, instead of emphasizing positive outcomes, a balanced perspective is encouraged through the use of cognitive restructuring techniques (e.g., evaluating evidence on each side of the issue). In response to negative realities, JJAM leaders also emphasize problem-solving strategies to help participants manage difficult situations.

Methods of Managing Inattention, Hyperactivity, Impulsivity, and Low

Cognitive Functioning—Compared with nonoffending youth, female juvenile offenders demonstrate poorer cognitive functioning and have higher rates of illiteracy and attention-deficit/hyperactivity disorder (ADHD; Lexcen & Redding, 2000). In a large juvenile justice study, 21.4% of girls were diagnosed with ADHD, while only 16.6% of boys met the same diagnostic criteria (Teplin et al., 2002). To address these behavioral and cognitive issues, the JJAM manual includes adaptations to provide effective teaching strategies when working with this population. Group facilitators are trained to deal with hyperactivity, attention deficits, and disruptive behaviors by administering immediate, frequent, and salient feedback for positive and negative behaviors. Reminders to provide such feedback were specifically written into the manual. Didactic lecturing was minimized, and hands-on, interactive teaching activities were included throughout JJAM to help maintain the attention of participants. To compensate for the high rates of illiteracy and lower cognitive functioning, activities were modified to require very little writing and reading by participants. The language throughout the manual was simplified; the average Flesch-Kincaid reading level of the material that facilitators read to participants was reduced to fifth grade, with a Flesch Reading Ease Score of 83, which is considered "easy" (Fielding, 2006; Flesch, 1948). The materials read by participants were reduced to a Kindergarten reading level, with a Flesch Reading Ease score of 97.4, which is considered "very easy," around the level of a comic book.

Techniques to Encourage Positive Participation—Group facilitators are trained in strategies to increase participation, such as praising youth who volunteer to participate, reducing fears of "looking stupid" by rewarding even minimal attempts to use anger management strategies, providing reluctant youth with scripts for role-plays to reduce performance anxiety, and providing imperfect modeling of new skills by group co-leaders to make it easier for youth to risk subperfect performances while learning new skills. In addition, individual and group incentive programs were created to encourage attendance, appropriate group interactions, and completion of assignments. Participants earn points each session for attending and staying throughout the session, following the group's rules, and constructively participating and completing homework goals² for skills practice. These points can be traded in for tangible rewards or privileges at the end of each session or saved

for upcoming sessions. In addition, to promote group participation and foster encouragement and reinforcement between participants, a group pizza party was added as a group-level incentive.

Conforming to Juvenile Justice Facility Regulations—Given the frequency of iatrogenic effects of residential juvenile justice placements (Redding, Lexcen, & Ryan, 2005), JJAM was designed to promote anger management skills, reduce physical and relational aggression, and decrease recidivism rates for girls in these settings. Therefore, the final, major manual adaptation involved adjusting the treatment to conform to residential juvenile justice facilities' rules and guidelines. Goals and homework tasks, as well as the behavioral management system and session activities, needed to adhere to facility guidelines and be approved by administration and staff. These adaptations were designed so that JJAM would fit the regulations and guidelines of most juvenile justice facilities. Nonetheless, flexibility was built into the manual so that JJAM could meet the rules and regulations of specific sites. For example, the JJAM manual includes a sample point list for rewards and specifies a process for establishing a reward-point list tailored to individual facilities.

Overview of the JJAM Treatment

The JJAM treatment is the result of multiple rounds of revisions to incorporate information from a pilot study, results of focus groups, feedback from an expert review panel, and a small initial trial of the JJAM treatment. The process of development is described in detail below.

JJAM is a 16-session, manualized group treatment for female offenders in residential juvenile justice facilities. The treatment groups are facilitated by two leaders, and 90-minute sessions are held twice weekly for 8 weeks. The JJAM treatment uses a cognitive-behavioral framework and relies on established techniques, such as cognitive restructuring, skills training (e.g., emotion regulation, coping, social, and communication skills), and problem solving. The first three sessions emphasize the distinction between anger and aggression, and these sessions help participants differentiate between emotions and behaviors, identify consequences of aggression, and understand the concept of relational aggression. The next session is devoted to changing appraisal processes using perspective-taking and other cognitive restructuring techniques, followed by sessions designed to promote participants' abilities to identify their physiological signs of anger and triggers of anger. The next phase of treatment is devoted to coping skills training, followed by sessions that focus on problem-solving skills and relationships. The final sessions are designed to help participants generalize skills to new situations and other settings and to make skills accessible for future use. Table 1 provides a more detailed description of the theory and purpose of each JJAM session.

Each session is formatted similarly, as structural predictability fosters learning and skills acquisition (Mazur, 2006). At the beginning of each session, each participant reviews her

²In the context of JJAM, "goals" refers to homework targets that involve skills practice and rehearsal, and "goal sheets" refers to "homework assignments." We avoid using the term "homework" when talking with juvenile justice youths, given their frequency of school failure and negative feelings about school assignments (Hinshaw, 1992; McEvoy & Welker, 2000).

goal sheet from the previous session. The goal sheet documents the ways in which the participant practiced the assigned skill since the previous session. Skills practice is a critical component of successful treatment, facilitating skill mastery and increasing the accessibility of skills for use in real-life situations (Mazur). Following the review of goal sheets, the previous sessions are reviewed. This review is accomplished by prompting participants for rhyming catch phrases taught during the previous sessions (e.g., “Just like a physical fight, being mean isn’t right”) and showing visual aids (e.g., a cartoon of two children fighting) that also were introduced during the previous sessions. This fun and repetitive review is designed to enhance accessibility of previous sessions’ critical material for future use. Next, we facilitate two to four creative, age-appropriate activities that we developed for each session to teach the session’s content and practice the associated skills. Activities include performing role-plays, playing games, analyzing movie clips, and doing arts and crafts projects. With practice, the skills learned should become more accessible for use when the participant experiences anger in the future.

Although the treatment is manualized, flexibility also is built into JJAM. Examples of anger-producing and aggression-provoking situations are elicited from participants and incorporated into every session. Participants are encouraged to provide examples from their lives, and emphasis is placed on using examples of both physical and relational aggression. At the end of each session, individual goals that involve skills practice are established, and a plan to complete each goal is created to increase the likelihood of practice completion. The group facilitators summarize the information and skills taught in the session and present the rhyming catch phrase and visual aid. Finally, individual and group participation points are calculated and recorded; points can be traded in for tangible rewards or privileges. Individual incentives are designed to encourage participants to attend sessions, cooperate and participate during the sessions, complete the homework assignments, and comply with behavioral goals. Group incentives are designed to encourage positive peer pressure toward the same ends. Key features of the treatment and manual can be seen in the sample session activity provided in Appendix A, which demonstrates a game used to teach cognitive restructuring skills, and in the sample goal sheet provided in Appendix B.

Process of JJAM Development

The treatment manual was created using a structured set of steps designed to generate a systematic development process with rigorous evaluation (see Figure 2). Treatment manual development began with initial adaptations to the CPP and is culminating in a RCT of the JJAM treatment. Although at the time of this writing the RCT was not yet complete, the following description tracks the steps involved in creating a manualized treatment for delinquent girls in residential juvenile justice facilities. This description is intended to offer a practical example of the process of adapting an existing treatment to meet the needs of a specialized population. For a more detailed discussion of and guidelines on adapting a treatment manual for use with specific populations, see Goldstein, Kemp, Lochman, and Leff (2011), and for more general guidelines on manual development, see Carroll and Nuro (2002) or Onken, Blaine, and Battjes(1997).

Adapted the CPP to Create the Anger Management Treatment for Female Juvenile Offenders

In order to make the CPP appropriate for use with delinquent girls, adaptations were made to the established treatment manual, resulting in the first iteration of JJAM, titled the Anger Management Treatment for Female Juvenile Offenders (AMFJO; Goldstein et al., 2007). The CPP topics were largely maintained, but specific activities were changed to make them culturally, developmentally, and gender appropriate, in addition to making them appropriate for use in juvenile justice facilities (e.g., included examples of multicultural girls instead of white boys, youth developed and performed a play instead of making a movie due to privacy issues regarding the recording of youth in justice facilities). In addition, to incorporate a key piece of the girls' aggression literature, we added one session specifically focused on relational aggression. AMFJO, the initial, revised version of the CPP, was the first attempt at a manualized anger management treatment for female juvenile offenders. Changes were not exhaustive of those needed; rather, an initial version of a treatment manual was created that would be usable with this population in a pilot study.

AMFJO included 18, 90-minute sessions facilitated by a leader and co-leader over 9 weeks in a female, post-adjudication, juvenile justice facility. Sessions were structured similarly to those of the current JJAM treatment, including reviews of previous sessions, introduction of new materials, and provision of tangible reinforcement for participants.

Pilot Study of AMFJO

A pilot study was designed to examine: (a) how the proposed theoretical model applied to delinquent girls in residential placement; (b) whether the methods of assessing differences between AMFJO and the treatment-as-usual (TAU) control condition were appropriate; (c) a very rough estimate of effect size of outcome differences between AMFJO and TAU; (d) whether youth understood the critical pieces of information and found the group activities, homework, and program materials appropriate, acceptable, and engaging; (e) youths' likelihood of regular attendance and homework completion and receptiveness to a behavioral management/incentive program; (f) potential obstacles to treatment success; and (g) other topics youth felt were relevant to managing anger and aggression that were not included in the treatment.

The adapted AMFJO treatment was piloted with a small sample of female juvenile offenders, as described in detail in Goldstein et al. (2007). Participants ($N = 12$) were delinquent girls, ages 14 to 18 ($M = 15.8$, $SD = 1.3$), in a post-adjudication facility, whose offenses included repeated truancy, drug charges, theft, trespassing, and assault. Facility housing units were randomly assigned to either the TAU + AMFJO condition or TAU.

At pretreatment, all girls in the pilot study scored in the clinical range on the Aggression Questionnaire (AQ; Buss & Warren, 2000), which measures physical aggression, verbal aggression, indirect aggression, hostility, and anger, and received at least one mental health diagnosis on the NIMH Computer-Diagnostic Interview Schedule for Children (C-DISC; Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000). Results revealed medium to large

effects in the relationships between number of diagnoses and anger, physical aggression, and indirect aggression³ (i.e., an approximation of relational aggression).

On measures of anger and indirect aggression, girls in the treatment condition improved significantly from pre- to posttreatment, and girls in the control condition worsened slightly or displayed no change, with large effect sizes observed ($f > .60$). Medium effect sizes ($f = .25$) were observed for changes in physical aggression.

The successful piloting of AMFJO suggested that the proposed theoretical model was applicable, but clinical and research challenges arose that needed to be addressed through more extensive manual revisions. Lessons learned from the pilot study suggested a number of further adaptations. These lessons from the AMFJO pilot study, along with the initial promising outcomes, guided the additional revisions of the anger management treatment manual.

Revised AMFJO to Create JJAM

Based on the pilot study, we revised and expanded the AMFJO manual to create the Juvenile Justice Anger Management (JJAM) Treatment for Girls. Throughout the JJAM development process, we maintained the mechanisms of action that are believed to make the CPP effective, including emotional regulation, cognitive restructuring of hostile attributions, and social problem solving. In terms of content changes from AMFJO to JJAM, greater emphasis was placed on gender-specific aspects of treatment. We added prompts throughout all sessions to elicit examples and discussions of both physical *and* relational aggression, and we added a session on repairing damaged relationships.

Although a great deal of flexibility remains, the JJAM manual contains more specific instructions and sample scripts for facilitators. Manualization was increased to simplify group facilitators' use of the manual (juvenile justice staff, who will eventually be conducting these groups, are typically underresourced and overworked; Patino, Ravoira, & Wolf, 2006) and to promote treatment fidelity across groups. Naturally, individual differences among group facilitators and members will influence group dynamics, but the increased manualization should help maintain the effective mechanisms of action in treatment.

The point-reward system also reflected an important set of changes from the AMFJO to the JJAM manual. The system was refined to offer participants the opportunity to redeem their earned points at the end of each session for immediate gratification or to accumulate them over time for larger rewards. A partial-point approach, allowing youth to earn some points for partial completion of goals, also was added to promote success, increase the salience of the goal sheets for participants, and provide individual and group reinforcement to encourage completion of future goal sheet tasks.

³At the time of the pilot study, the indirect aggression subscale of the AQ was the best available approximation of relational aggression using a standardized measure. Since publication of the pilot study findings, other measures have become available to assess relational aggression (e.g., See Little, Henrich, Jones, & Hawley, 2003; Rusby, 2009), including the Peer Conflict Scale (PCS; Marsee & Frick, 2007), which we are using in the JJAM RCT because it was developed for and normed on juvenile offenders. In the RCT, we also are supplementing PCS data by administering a peer nomination measure, which is one of the most widely used methods for assessing relational aggression (Crick & Grotpeter, 1995).

Incorporating the extensive revisions above, JJAM was expected to be more appropriate, comprehensible, and appealing to potential female delinquent participants and group facilitators than was AFMJO or the CPP program on which it was originally based. This initial version of JJAM retained the 9-week, 18-session format of AFMJO, with each session lasting 90 minutes. It was thought to be short-term enough to accommodate the high turnover rate in residential juvenile justice facilities but long enough to encourage internalization of treatment material and development of therapeutic skills.

Conducted Staff Focus Groups on JJAM

Upon completion of the initial JJAM manual, we conducted two focus groups with juvenile justice staff. Grounded in Participatory Action Research (PAR) methodology, which seeks input throughout the treatment development process from community stakeholders, prospective treatment recipients, and prospective treatment providers (Natasi, 2000), staff focus groups were held at two different facilities to obtain a diversity of approaches and opinions. One focus group was held at a large, all-female, post-adjudication facility in a rural area, and the other was held at a small, all female, post-adjudication group home in an urban area. No staff members at either site had led an intervention that was manualized or empirically based, but 7 of the 16 focus group participants had facilitated anger management groups.

For each topic area discussed, focus group participants first completed an open-ended questionnaire, and responses were then discussed as a group. This approach allowed us to obtain participants' initial, independent responses to questions and also learn their thoughts after a more collaborative, reflective group discussion.

The general feedback received about group treatment at the facilities emphasized many aspects already included in JJAM, such as the benefits of structured, hands-on activities to maintain attention and encourage participation and the value of teaching concrete skills that can help girls channel physical aggression into more constructive behaviors. We provided an overview of JJAM and its goals to staff and sought feedback on the potential effectiveness of the treatment and possible obstacles to success. Staff at both facilities approved of the timing and length of sessions and helped to develop lists of incentives feasible in the juvenile justice environment. Staff members felt that these items would serve as positive rewards that would interest participants and provide the motivation to attend sessions, positively participate, and complete homework. In terms of activities in the manual, staff participants noted the importance of readability, and they suggested incorporating more examples to facilitate group leaders' use, particularly in the early sessions when facilitators are building rapport with participants. Staff did express concerns about the implementation of goal sheets, believing that it would be difficult for youth to complete them and for staff to sign them.

Suggestions were incorporated into the JJAM manual. We included more examples and troubleshooting sections to help group facilitators address common difficulties that might arise in group discussions, such as participants' lack of understanding, inability to provide examples, and/or use of inappropriate or unrelated examples. In addition, because between-session skills practice is considered a critical element in the JJAM treatment, goal sheets

were simplified further to facilitate participants' goal completion and staff members' ease in signing; little to no writing was required, the reading level was reduced to Kindergarten, the space for a staff signature was more clearly identified, and the staff signing process was simplified.

Acquired Expert Review of JJAM

We submitted the JJAM manual to five individuals with expertise in at least one of the following areas: anger management, juvenile justice, treatment of aggressive girls, and/or culturally effective health care. Overall, the reviewers praised the manual. Specifically, they indicated that the manual was "thorough and user-friendly" and noted the importance of the breadth of topics addressed in the JJAM manual. The experts' suggestions for changes to individual sessions' content and activities were very specific, as expected, but the suggestions were not wholly consistent across reviewers. For example, one reviewer praised a role-play activity taken directly from the CPP manual in which participants, pretending to be superheroes facing villains, practiced coping skills to stay calm; another reviewer felt that this activity was not age and/or gender appropriate. Although we agreed with the latter reviewer in theory, youth in the AMFJO pilot study provided very positive feedback about this activity, and many other role-plays based on youths' real-life experiences were already included in the manual. Therefore, we decided to retain the superhero role-play in the treatment.

We incorporated some significant changes to individual topics and activities into the manual based on suggestions from the expert review panel. Specifically, two of the expert reviewers recommended emphasizing variability in types (e.g., irritation, rage) and levels (e.g., mild, moderate, severe) of anger across situations, rather than asking participants only to recognize whether or not they were angry in given situations. Consequently, we incorporated this approach to evaluating anger into most activities that were already in the manual by adding an "anger thermometer" poster, which provided a visual aid to help girls identify the types and levels of anger experienced.

Three reviewers felt that the rhyming catch phrases were too long, would be difficult to remember, and would take up valuable session time. Despite this feedback, we retained the catch phrases. We believed that repeated review of previous material was critical to treatment success, as each treatment session incorporates previously taught material. Furthermore, in the pilot study, most participants reported liking the catch phrases and finding them helpful in remembering the purpose of previous sessions; pilot study facilitators reported that participants easily remembered most catch phrases. The expert reviewers offered no other recommendations or specific feedback about JJAM, other than wording suggestions for the manual.

Initial Trial of JJAM

After incorporating the expert review panel's feedback into the JJAM manual, an initial trial was conducted to provide preliminary information about the JJAM treatment, participants' adherence to treatment, and methods of further improving the manual, the treatment protocol, and the study protocol. Although we sought participation of six youth, ineffective

recruitment procedures that required written parental consent resulted in enrollment of only two girls. These girls were both 16 years of age and had resided in the designated residential, post-adjudication facility for 2 weeks prior to study enrollment. Their anticipated lengths of stay were 90 days.

Participants in JJAM's initial trial were assessed using a combination of standardized tests, structured interviews, self-report measures, peer nomination instruments, and chart reviews. Youth were scheduled to be assessed 2 weeks before and 2 weeks after treatment, but one girl was unable to participate in posttesting due to an unexpected, early discharge from the facility for positive behavior. The initial trial adhered to the JJAM treatment manual and occurred over a 9-week period, with two sessions per week.

Due to the small sample size, it would be misleading to examine and report empirical findings. Instead, the initial trial was designed to provide information about the feasibility of the JJAM treatment and study protocol. Based on the initial trial, major manual revisions were suggested by facilitators, including further increasing the level of manualization, varying the session structure, reordering several sessions, and decreasing the total number of sessions. In addition, changes to the study protocol were needed to recruit more participants and reduce attrition. As a result, we revised the manual and study protocol.

Revised the Initial Version of JJAM to Create the Current Version of JJAM

Findings from the initial trial informed some major adaptations to the JJAM treatment manual. For example, group facilitators raised concerns about the amount of direction and scripting throughout the manual. The treatment is designed to be highly manualized with flexibility built-in, but facilitators reported that the amount of manualization occasionally made sessions feel too didactic. Although the small sample size of the initial trial may explain the stiltedness of some group discussions, we decided to facilitate discussions by incorporating more questions to participants, particularly during session sections that were heavily scripted.

In addition, we revised the session structure so that the review of goal sheets would occur before the review of previous sessions. We made this change for three reasons: (a) Goal sheet review offers participants the opportunity to talk about important events in their lives, thereby creating an opportunity for participants to feel that they have had a chance to have their thoughts and feelings heard before moving onto the new lessons for the day's group; (b) detailed discussion of goal sheets provides a thorough review of the skill(s) learned during the previous session; and (c) reviewing goal sheets provides many opportunities for facilitators to praise youths' efforts and to award points, thereby reinforcing positive group behaviors at the beginning of each session.

Following the initial trial, we combined Sessions 4 and 5, both of which fostered learning of cognitive restructuring and understanding that multiple perspectives exist of situations. Initially, we expected that female juvenile offenders would have difficulty grasping the concept of cognitive restructuring. However, within the initial trial sessions, participants demonstrated no trouble understanding cognitive restructuring or identifying multiple perspectives about anger-provoking situations. As a result, both of these sessions required

far less than the 1.5 hours allotted; therefore, we combined these two sessions in the revised JJAM manual. Additionally, we condensed the final three sessions into two, which involve developing, rehearsing, and performing a play as a means of providing a memorable context to facilitate skills recall. These two changes allowed the program to be shortened without losing key content. Reducing the treatment protocol by 1 week was expected to reduce attrition that resulted from releases from facilities following 60-day placements.

Another important adaptation to the JJAM manual involved reordering later sessions and expanding some of the content. These sessions cover important skills, including effective communication, problem solving, identifying options and consequences of behaviors, and planning for the future, respectively. The sessions were reorganized so that the first two sessions could better lay the groundwork for the latter two sessions, which review anger management tools and skills with an emphasis on applying communication and problem-solving techniques to repair damaged relationships and foster the use of anger management skills post-discharge.

As a result of these changes following the initial trial, the JJAM Treatment for Girls is now a 16-session, 8-week program, with two 90-minute sessions per week.

RCT of JJAM

We are currently evaluating the efficacy of the JJAM treatment through a RCT of 70 female juvenile offenders at three girls' post-adjudication facilities in Pennsylvania and New Jersey. Participants within each facility are randomized to receive TAU or TAU + JJAM. TAU is each facility's standard treatment, and JJAM is administered by external, clinical psychology doctoral students with at least 1 year of clinical training. Youth are assessed within the 2 weeks preceding JJAM participation (or the TAU control period), within 2 weeks of completing JJAM (or the TAU control period), and at 6-month follow-up. The primary study goal is to examine JJAM's efficacy as measured by reductions in anger, physical aggression, relational aggression, and recidivism rates; data are obtained using self-report measures, structured interviews, peer-nomination methods, juvenile justice staff ratings, program charts, and state-based recidivism records. Additionally, we are evaluating the feasibility and acceptability of treatment. Finally, we are examining the relationships among anger, physical aggression, relational aggression, and mental health problems in delinquent girls. Based on the results of this study, we will revise and expand the JJAM treatment, as needed, and plan a full-scale clinical trial to assess the effectiveness of the JJAM intervention when administered by mental health staff at a large number of girls' residential juvenile justice facilities.

Empirical Support

JJAM was developed in response to the high levels of anger and aggression within this population, court-mandated need for anger management treatment, and unique clinical needs of female juvenile offenders. Although no anger management programs previously existed to address the unique needs of female juvenile offenders, anger treatments for children and adolescents have demonstrated promising results. Programs to treat childhood anger include antecedent-behavior-consequence models, skills training, rehearsal applications, problem

solving, goal-setting, parent and teacher training, and other cognitive-behavioral therapies (e.g., Conduct Problems Prevention Research Group, 1992; Lochman et al., 1999; Reid & Webster-Stratton, 2001; Smith, Larson, Debaryshe, & Salzman, 2000). Many studies suggest that anger management programs that target children's perceptions of anger-producing stimuli, teach alternative solutions to manage emotions, and promote goal-attainment skills may reduce aggression (e.g., Hollenhorst, 1998; Larson, 1994; Lochman & Dodge, 1994; Lochman & Lenhart, 1993). A meta-analysis of CBT programs for anger among children and adolescents revealed positive effects and identified the components of feedback, modeling, and homework as particularly important for treatment effectiveness (Sukhodolsky, Kassinove, & Gorman, 2004).

In addition to including the aforementioned characteristics, the CPP was selected as a basis for the JJAM Treatment for Girls because of its strong evidence base. At 3-year follow-up, boys who participated in the CPP had lower substance abuse rates, higher self-esteem, and more competent social problem-solving skills than did boys in the untreated control condition (e.g., Lochman, 1992). Positive CPP effects included reductions in attention problems, reductions in school suspension rates, and academic improvements (Larson & Lochman, 2002; Lochman et al., 1999). Additional research supported these findings with boys and girls in a school setting (Lochman & Wells, 2003), children and adolescents with disruptive behavior disorders in outpatient settings (Van de Wiel et al., 2007), and deaf youth (see Lochman et al., 2001); the CPP produced significant reductions in aggression, self-reported delinquency, parent-reported substance use, and teacher-reported behavior problems. The general empirical support of anger programs for children and adolescents, specific outcome data on the CPP, and the positive results of the AMFJO pilot study provide promising support for JJAM's efficacy.

Limitations and Future Research

JJAM was developed to meet the anger management and aggression reduction needs of female juvenile offenders in residential placements. Notably, though, residential juvenile justice facilities must provide a range of treatments (e.g., substance abuse, trauma coping, education) to their residents, and anger management is typically only one component of a much broader treatment or rehabilitative program. We struggled with both the concept and practicalities of developing an anger management and aggression reduction treatment in isolation from other facility programming. However, we selected this approach for two reasons: (a) Given the lack of empirically supported treatments for female juvenile offenders in residential facilities, we could not systematically address all treatment aspects simultaneously and believed that anger management was a critical component to develop and evaluate; and (b) addressing only one juvenile justice treatment component would allow us to conduct a tightly controlled, clean efficacy study of JJAM using a RCT, which represents the "gold standard" in research methodology (Nezu & Nezu, 2008).

To increase the internal validity of the study and strengthen the conclusions that can be drawn from the data, graduate students facilitated JJAM groups, thereby limiting the external validity of the study. Nonetheless, JJAM groups took place on-site at the juvenile justice facilities, and facility staff members were regularly incorporated into treatment via goal

sheets. If results from the JJAM RCT demonstrate positive effects, the next phase of treatment evaluation will involve an effectiveness trial in which juvenile justice facility staff members in the treatment condition facilitate JJAM groups within the context of broader facility programming.

If the efficacy and effectiveness study results support JJAM's use, we intend for facility mental health staff to incorporate JJAM into their facilities' programming. To facilitate this goal, the JJAM treatment is highly manualized, which should promote treatment fidelity and help reduce the need for extensive training of facilitators. Juvenile justice staff members often report failing to receive adequate instruction for and supervision of their work with this challenging population (Roberts & Springer, 2007), despite reports that practitioners seem to have particular difficulty working effectively with girls in the juvenile justice system (Hipwell & Loeber, 2006). Although training will be required to facilitate JJAM groups, the increased manualization should abbreviate this training period and reduce the preparation needed before each session.

Of course, this manualized approach and emphasis on treatment fidelity can generate challenges, namely, lack of flexibility in delivering treatment. A balance between structure and flexibility is difficult to reach, and the increased manualization reflects our emphasis on both the real-world utility of the treatment and findings that high levels of manualization typically improve effectiveness study outcomes so that they more closely match the strong positive outcomes of efficacy trials (Carroll & Rounsaville, 2008). Nevertheless, we incorporate flexibility by seeking examples from participants and facilitators for use in discussions and activities in order to address the unique needs and interests of each group and its members.

Future research should involve dismantling studies to better understand the treatment components that produce positive outcomes. Ideally, JJAM would be tested against the original CPP to determine if the gender-, age-, and justice-specific adaptations enhance efficacy. However, the CPP would need to be so dramatically altered to accommodate juvenile justice facility requirements that this control condition would no longer represent the original treatment. Instead, dismantling studies could specifically test the gender-specific adaptations of the treatment to examine their roles in treating anger and aggression among female juvenile offenders. Additionally, the theoretical model underlying JJAM should be tested by evaluating which mechanisms of action are most responsible for improvements in anger responses, reductions in aggression, and reductions in recidivism. Results of such studies could improve the treatment of female juvenile offenders by making treatment more efficient and, subsequently, using juvenile justice system resources more effectively.

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Appendix A Sample Session Activity

This session activity, excerpted from Session 4, demonstrates a game used to introduce the concept of cognitive restructuring. The activity focuses on reframing thoughts to change feelings and behavior and to reinforce the idea that different interpretations of situations can lead to different emotional and behavioral responses. In addition to its explicit use in this game, cognitive restructuring is woven throughout the 16-session JJAM treatment.

SESSION 4, PART V: COGNITIVE RESTRUCTURING SKILLS

LEADER

Have you ever tried to change the way that you feel? It's pretty hard, right? Instead, one way we can change the way we feel and react to situations is by changing the way we think about them. We are going to practice ways that we can change our thoughts about situations so that we can change the way we feel about them and react to them.

Think about a recent situation when you jumped to a conclusion too quickly and got angry before you knew what was really going on.

We are going to play a game.

The LEADER and CO-LEADER should also play this with the girls.

Are you all thinking of a situation when you got angry really fast? Keep it in mind but don't tell us about it yet. We will each have a chance to explain our situations at the end. Okay, I am going to start and spin this spinner. Whoever it points to has to tell us the "First Thought" that came into your head when that situation happened. Say your thought as though it is happening right now. After you say your thought, you get to spin. I'll start.

CO-LEADER

Write each girl's "First Thought" on a separate piece of red construction paper that has "First Thought" at the top.

LEADER

For the situation I am thinking about, my "First Thought" was "I'm not cool enough to hang out with them."

Then the LEADER spins the spinner.

Make sure the girls are saying their "First Thoughts" in present tense. Play until everyone has had a chance to give her "First Thought" about her situation. If the spinner lands on the same person more than once, spin it again.

When it is the CO-LEADER'S turn, she can either make up her own situation or use the following example:

EXAMPLE:

CO-LEADER: I can't do anything right.

TROUBLESHOOTING

If a girl suggests a positive first thought, ask her why she felt so good about a situation that made her so angry.

EXAMPLE:

Girl: My first thought was that it's going to feel so good when I beat her up so bad.

LEADER: Your thought was related to the reaction that you planned and you may feel like you were gaining something by beating the girl up. Do you think you might also have to pay for your reaction?

Girl: Probably.

LEADER: In this case, your second thought might be that you would get in trouble if you beat the girl up. Then, you would probably have a different reaction.

After each girl has given a "First Thought," play the game again with the following instructions:

LEADER

Okay, now when the spinner lands on you, try to think of a different thought that can also explain the situation. We can call this our “Other Thought.”

I’ll go first. Instead of thinking that I’m not cool enough to hang out with them, my “Other Thought” is that maybe my friend was just busy when I wanted to hang out with her.

Then the LEADER spins the spinner.

CO-LEADER

Write each girl’s “Other Thought” on a separate piece of blue construction paper that has “Other Thought” at the top. If the girls are having a hard time coming up with alternate thoughts, have the CO-LEADER give an example.

EXAMPLE:

CO-LEADER: Maybe she had a really bad day and she didn’t mean to take it out on me.

LEADER

Great job thinking about your “First Thoughts” and “Other Thoughts.” Now, (CO-LEADER) is going to hand you two sheets of construction paper, one with your “First Thought” written on it and one with your “Other Thought” on it. We are all going to hang our thoughts on this paper clothesline.

Have the girls hang their “First Thoughts” and “Other Thoughts” next to each other on the paper clothesline.

Let’s get back into our circle. We are going to read each person’s “First Thought,” and that person will tell us the story about what happened. Then we will read the person’s “Other Thought,” and she will talk about how her reactions in the situation might have been different if she had thought the “Other Thought” instead.

I’ll start. My “First Thought” was “I’m not cool enough to hang out with them.” The story behind that was, once, when I was 16, I wanted to hang out with my best friend, and she told me she was busy that night. My “First Thought” was that she must have found a new, more popular group of friends to hang out with and didn’t want to hang out with me anymore. I was so upset for the rest of the weekend and didn’t want to talk to her the next week. My “Other Thought” was “Maybe my friend was just busy the night I wanted to hang out with her.” If, at the time, I thought that instead, I probably wouldn’t have been so upset, and I definitely wouldn’t have ignored her all week.

Who can give me a different “Other Thought” for my situation, so I may not have gotten so upset?

Allow the girls to respond. Allow no more than three suggestions for “Other Thoughts” before moving onto the next girl’s story.

Okay, let's move on to the next person's "First Thought." What is the story behind your "First Thought?"

Allow the girl to tell the story.

Now, tell us your "Other Thought."

Allow the girl to tell the "Other Thought."

How would your reaction in that situation have changed if you focused on your "Other Thought" instead of your "First Thought?"

Allow the girl to respond.

Who can suggest another "Other Thought" that could have led to a different reaction – one that helped her get what she wanted out of the situation and didn't get her in trouble?

Lead each of the girls through this exercise by asking (1) what was her "First Thought," (2) what was the situation, (3) what was her "Other Thought," (4) how would her reaction have changed if she focused on her "Other Thought," and (4) "Other Thought" suggestions from the group that might result in more positive reactions.

CO-LEADER

Either make up situation or use the following example:

EXAMPLE:

CO-LEADER: My "First Thought" was, "I can't do anything right." One day, I came home after school and cleaned the whole house before my mom got home. I thought she would be so happy when she got home. But, when she came home, she threw her purse down on the floor, went into the kitchen, opened the fridge and saw that some milk had spilled that I forgot to clean up. She yelled, "Do I have to do everything around here?" You can't even clean up the milk that you spilled in the fridge." I was so mad that she didn't even notice how clean the rest of the house was. I walked out of the room and slammed the door and started yelling all the way to my room. I didn't even eat dinner with her, and she never thanked me for cleaning the house.

My "Other Thought" was, "Maybe my mom had a really bad day, and she didn't mean to take it out on me." If I had focused on that thought, then maybe I would have asked her what was wrong, instead of fighting with her. She probably would have felt better and noticed all of the cleaning that I had done that day.

LEADER

If two girls came up with similar situations, point out that people react differently to the same situation because they THINK differently about the situation. Emphasize that the way someone thinks about her situation has a big impact on how she reacts in that situation.

You may be surprised that _____ & _____ (insert names of 2 girls) had similar situations but reacted so differently. Your reaction to a situation is partly

unique to you and partly depends on the situation. Earlier today we talked about the part that depends on the situation, and now we're working on the part that's unique to you.

TROUBLESHOOTING

If none of the situations are similar, the LEADER and CO-LEADER can provide an example of how they have reacted to a similar situation very differently.

EXAMPLE:

LEADER: I already told you about when I was 15, and I wanted to hang out with my best friend and she told me she was busy that night. Again, my "First Thought" was that she was mad at me and didn't want to hang out with me at all anymore. I was so upset for the rest of the weekend and didn't want to talk to her the next week. I know (CO-LEADER) had a similar thing happen.

CO-LEADER: Yeah...the same thing happened to me, but my "First Thought" was that she had something else to do that night. I just thought we would hang out another night, so I called another friend to hang out with.

LEADER: So, you may be surprised that we had such different reactions to such a similar situation. But our reactions to a situation are partly unique to us and partly depend on the situation. Earlier today we talked about the part that depends on the situation, and now we're working on the part that's unique to you.

LEADER

Did anyone find it easier to come up with "Other Thoughts" for each other than for yourself?

Allow for responses.

Sometimes it's really hard to come up with another way to see a situation when you're in it. With practice, though, it gets much easier to think of other ways to see situations so that you can change your thoughts – and that should help change your feelings and reactions.

Appendix B Sample Goal Sheet

This goal sheet, which also contains the catch phrase, is from Session 4 and encourages a review and practice of cognitive restructuring. Participants are expected to use the goal sheet to practice the new skill before the next session. Full or partial points are awarded for practicing the assigned skill (1 pt.) and/or obtaining a staff member's signature (1 pt.).

Goal Sheet

CATCH PHRASE: Instead of thinking the worst, seek other explanations first.

GOAL: See how my thoughts can affect my reactions.

What do I do? Write down my thoughts and reactions for 2 situations before the next group.

Time 1

When? _____
Situation? _____

1st Thought

Reaction

2nd Thought

Reaction

Followed Plan? Y/N
(Yes/No)

Time 2

When? _____
Situation? _____

1st Thought

Reaction

2nd Thought

Reaction

Followed Plan? Y/N
(Yes/No)

4

Highlights

- No empirically-based or-supported anger management treatment exists for delinquent girls.
- We developed the Juvenile Justice Anger Management (JJAM) Treatment for Girls.
- This paper describes JJAM's theory, content, development and evaluation process.
- We provide an overview of JJAM and describe the goals and content of each session.
- JJAM was designed to alleviate anger and reduce physical and relational aggression.

Figure 1.

Theoretical model underlying the Juvenile Justice Anger Management (JJAM) Treatment for Girls. Treatment completion is expected to produce improvements in the proposed mechanisms of action and reductions in emotional, behavioral, and diagnostic outcomes.

Figure 2. Steps of the Juvenile Justice Anger Management (JJAM) Treatment for Girls manual development process.

Table 1**JJAM Theory and Session Purpose**

Theory	Session	Purpose
Distinguish between anger and aggression	1	To introduce participants to the program and inform them of the purpose and structure of the group and the roles of the facilitators and group members. The activities in the session focus on understanding the importance of trust and getting to know one another.
	2	To identify the differences between anger and aggression, responses to anger, and the consequences of these responses. The activities in this session also focus on the importance of goal setting as a means of avoiding anger-provoking situations that may result in youth getting in trouble.
	3	To introduce the idea of social aggression and to identify consequences of being both a victim and an aggressor (e.g., loss of friendship, loss of support). Activities encourage participants to recognize that social aggression can cause problems in much the same way as physical aggression.
Change appraisal processes	4	To use cognitive restructuring techniques to encourage participants to view anger-provoking situations from multiple perspectives and to help girls question assumptions that actions have hostile intent. The activities in this session provide opportunities to practice cognitive restructuring techniques.
Identify anger	5	To identify early warning signs of anger, particularly physiological signs. The activities in this session provide opportunities for each participant to recognize her own physiological responses to anger.
	6	To identify people, places, and things that frequently trigger anger. Activities encourage participants to think of new ways to avoid triggers of their anger.
Deal with anger to prevent aggression	7	To identify, practice, and apply different coping strategies to anger-provoking situations. Activities encourage participants to develop new coping skills.
	8	To identify self-talk as an important and useful coping strategy. Activities in this session provide opportunities to practice using this skill.
	9	To underscore the importance of delaying responses to anger-provoking situations. Activities in the session involve use of this coping strategy.
	10	To help participants effectively communicate their feelings when they are upset or angry. Activities provide youth with opportunities to talk through difficult situations without harming relationships.
Choose the best coping strategy	11	To introduce structured problem-solving steps to select the best coping strategy for use in anger-provoking situations. The activities in this session provide opportunities to practice the problem-solving steps and to improve the accessibility and generalizability of the coping skills.
	12	To teach participants to evaluate options and decide which actions would be best in given situations. Activities in the session provide opportunities for participants to evaluate options and consequences of behaviors in a variety of situations based on each girl's self-interest.
	13	To focus on ways of repairing damaged relationships. Activities teach effective ways of apologizing to others and asking for forgiveness.
	14	To synthesize the skills and tools taught in the previous sessions. Activities encourage participants to apply the skills and tools they learned to real-life situations, enlist help of supportive individuals at home and in their communities to encourage skill use, and identify posttreatment goals.
Make skills accessible for use	15	To cement skills and make them accessible for future use. Participants develop and rehearse a play integrating and applying skills taught in the JJAM program to frequently encountered anger-provoking situations.
	16	To continue to cement skills and make them more accessible for future use. Participants perform the play developed in Session 15.