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Piloting the Family Check-Up With Incarcerated Adolescents and Their Parents

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Abstract

The purpose of the current investigation was to pilot the Family Check-Up (FCU; see T. J. Dishion & K. Kavanagh, 2003) with 10 incarcerated adolescents and their parents or guardians. The FCU is based on principles of motivational interviewing (W. R. Miller & S. Rollnick, 2002). The authors delivered FCU with a high degree of fidelity and adherence on the basis of ratings from parents, therapists, and observers. Results suggest that the FCU positively impacted families (effect sizes were generally in the medium range). After our intervention, adolescents were more confident in their ability to resist drug use, and parents were more confident in their ability to impact their adolescents' risky behaviors. Parents and adolescents both reported being highly satisfied with this intervention. These results warrant further investigation of the FCU with incarcerated adolescents and their families in a controlled clinical trial.

It is important to develop and evaluate treatments specifically for incarcerated adolescents. Treatments delivered to juvenile justice system-involved adolescents are emerging, but well-controlled clinical trials have mainly been conducted on an outpatient basis (Dennis et al., 2002; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998). Unfortunately, many juvenile justice system adolescents have been or will be incarcerated at some point, and it is important to study methods of effectively treating them and their families in this unique setting (i.e., during incarceration).

In addition to problems with delinquent behavior, incarcerated adolescents have high rates of substance use problems (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). Parents can directly and indirectly influence adolescent substance use by providing overt modeling,

advising against and imposing punishment for use, influencing their adolescent's substance use beliefs, and affecting peer selection (Johnson & Johnson, 2000). Poor supervision, inconsistent discipline, poor parent-child relations, and family conflict are related to adolescent substance use (Windle, 1999).

The Family Check-Up (FCU; Dishion & Kavanagh, 2003) is an assessment and feedback intervention that is based on motivational interviewing (MI) principles (Miller & Rollnick, 2002) and is designed to enhance parental recognition of their child's risk behaviors and to provide support for reducing these risk factors. There is an initial interview, followed by a multimethod assessment and, finally, a feedback session. The FCU is based on the premise that providing psychological assessment feedback to families promotes motivation for change (Sanders & Lawton, 1993). The FCU includes the techniques endorsed by researchers in the field of family-based interventions (Hogue & Liddle, 1999): focusing on protective factors in the family (parental strengths and competencies), presenting normative developmental guidelines, intervening in both parenting practices and family process characteristics, using skill-oriented rather than psychoeducational interventions; and attending to the psychosocial issues of the parents.

The FCU is an intervention primarily for parents and guardians and is designed to support appropriate parenting and provide motivation to change maladaptive parenting (Dishion & Kavanagh, 2003). Feedback is provided to parents on the basis of a multimethod assessment, which includes their pretreatment assessment and the Family Assessment Task (FAT; see Method). There are four key elements in providing feedback: emphasizing the importance of parenting to the adolescent's success, focusing on harm reduction, tailoring feedback, and supporting motivation to change.

Providing feedback and developing a menu of options are key components of FCU. During feedback, a graphical summary of the assessment findings is reviewed with the parents and adolescents. The following elements are reviewed during the process: parental stressors (including emotional well-being and available social support), family relationships and practices (including use of encouragement, limit setting, supervision, and approach to problem solving), peer influence (including prosocial peer behavior, substance use, and peer acceptance/rejection), and adolescent-specific aspects (including problem-solving and discussion skills and prosocial behaviors). The adolescent's strengths are acknowledged, and positive aspects of the parenting style are emphasized. Progression may then be made to address more troubling adolescent behaviors (involvement in crime and resulting incarceration) that both adolescent and parent are interested in reducing. Parenting practices that can help reduce future incarceration (such as monitoring adolescent substance use) are then discussed. This information is used to help parents and adolescents generate a list of change options (or menu of goals) regarding parental monitoring, which may include a low-intensity option such as parent requesting that adolescent calls home or a higher intensity option, such as parent contacts with probation officer. During FCU, parents and adolescents are asked what (if anything) they might do now, during the adolescent's incarceration, to work toward these change options. All of these FCU procedures are delivered within an MI framework (see Miller & Rollnick, 2002). Responsibility for change rests with the family. Therapists maintain an empathic stance throughout the session and offer advice when permitted. A menu of change options is generated, and therapists assist in instilling a sense of hope for change.

In a study evaluating the efficacy of the FCU for 40 high-risk families, Rao (1999) found significant reductions in child behavior problems and improved parenting practices compared with a wait-list control group. Changes in parenting were correlated with changes in child behavior. Therapist adherence to MI principles was related to parental reports of improved parenting, which, in turn, were associated with improved behavior. In another study of 40 high-

risk families (O'Leary, 2001), FCU resulted in more structured parent– child interactions and reduced parent permissiveness, even in families with depressed mothers. Dishion, Nelson, and Kavanagh (2003) recently published a randomized control trial on 71 ethnically diverse high-risk adolescents and their families assigned to either FCU or standard services. These adolescents had serious conduct problems. Results indicated clear improvements in parental monitoring and reductions in substance use for adolescents in FCU.

The purpose of the current investigation was to pilot the FCU on 10 incarcerated adolescents and their parents. We seek to demonstrate feasibility to recruit both parents and adolescents as well as to provide both empirical indicators of success (simple pre- posttests in a nonrandomized design) and indicators of client satisfaction. We also provide results of our efforts to maintain fidelity to treatments that should be relatively easy to transport to practitioners using this manualized treatment.

Method

Participants

Participants in this study were 10 families whose adolescents were incarcerated in a juvenile justice facility. Among the 10 parents and guardians in this study, 2 were fathers, and 8 were mothers. They had a mean age of 39.9 years ($SD = 6.72$, range = 32–52). Five parents or guardians identified as members of an ethnic minority group. The average depressive symptom score (assessed with the Center for Epidemiological Studies Depression Scale [CESD]; Radloff, 1977, 1991) for parents and guardians was 20.21 ($SD = 3.98$, possible range = 0–60).

Among the 10 adolescents in this study, 3 were girls, and 7 were boys. Adolescents had a mean age of 16.9 years ($SD = 1.10$, range = 15–19). Seven adolescents identified as members of an ethnic minority group. Adolescents reported having been previously incarcerated or detained an average of 3.9 times ($SD = 1.57$). Alcohol and marijuana were the most frequently reported substances used by adolescents.

Participants in this study were all incarcerated at a state juvenile correctional facility. Youths in that facility have committed crimes ranging from truancy to murder. While incarcerated, youths at the facility are involved in both individual and group interventions, as needed, aimed at a variety of problems (e.g., sex offending, drug dealing, anger management). Many of these incarcerated youths also attend an 8-week psychoeducational group treatment for substance use or abuse that meets twice per week. More in-depth substance abuse services are available as indicated, and 12-step groups are also available. Youths also receive medical, dental, and psychiatric services and attend the facility's school. Community religious organizations are involved with youths at the facility.

Procedure

Consent—Facility social workers were asked to refer parents and adolescents for a brief family intervention. They were approached individually and during their weekly group supervision meeting. Families were approached until 10 families had been recruited. No families dropped out of the study once they were recruited. Youths referred to the intervention were approached for assent. If a youth agreed to participate in the study, her or his legal guardian was approached for consent. Of the 12 families approached for this study, two parents could not be reached after 5 days of calling. Youths and guardians were informed that all information provided would be strictly confidential, except plans for escape, plans to harm self or others, and reports of child abuse. Assessments took place in a private office at the juvenile justice facility (for one or two parents, questionnaires were completed via phone interview at their

request). All intervention sessions took place in a private office at the juvenile justice facility. Institutional review board approval was gained for all procedures.

FCU overview—The FCU in this study was delivered in a single 2- to 3-hr session by a bachelor's, master's, or doctoral-level staff member (although most sessions were delivered by a bachelor's level staffer). The original FCU was delivered on three separate occasions, during 1-hr sessions. We chose the shortened one-session format primarily because of correctional facility constraints and parent travel considerations. Nonetheless, the FCU delivered in this study included all of the elements of the original FCU: Parent and adolescent completed paper-and-pencil assessments, engaged in a series of structured family tasks (FAT; see below), received feedback, and developed a menu of goals for behavior change.

Assessments—Assessments were conducted by a trained bachelor's-, master's-, or doctoral-level staff member (although most were conducted by a bachelor's-level staff member). The pretreatment paper-and-pencil assessments involved 30-min interviews with the parent and adolescent, individually. The FAT occurred before the intervention, with both parents and adolescents present. Thirty-min parent and adolescent posttreatment assessments were administered directly following the FCU intervention. Staff members participated in 20 hr of training and received 1 hr of individual supervision per week and 1 hr of group supervision per week. All assessment data were reviewed by a doctoral-level staff member. Participants were given snacks during the assessments, and parents received a \$50 gift certificate after the posttreatment assessment.

Background questionnaire—Parent and adolescent sociodemographic information was recorded, including age, gender, and ethnicity/race, during the pretreatment assessment. In addition, adolescents were asked to report on school progress, their friends, and number of times detained or incarcerated. Parents were asked to report educational level, marital status, employment status, and family income.

Past month substance use—Both parent and adolescent completed this questionnaire from the Treatment Outcomes and Performance Pilot Studies Enhancement project (Substance Abuse and Mental Health Services Administration, 2002) during the pretreatment assessment. The questionnaire asks respondents to indicate how often they have used various substances (alcohol, cocaine, marijuana, heroin, hallucinogens, methamphetamines, barbiturates, sedatives, inhalants, and cigarettes) over the past month with a 5-point scale ranging from 1 (*no use*) to 5 (*daily use*). Adolescents reported on substance use during the month preceding incarceration.

Parent and Student Self-Checks—These were completed by parents and adolescents during the pretreatment assessment and were developed by Dishion for use in the FCU (see Dishion & Kavanagh, 2003). The Student Self-Check assesses adolescent perception of parent family management (e.g., monitoring, limit setting and rules, adolescent–parent relationship). Data collected by Dishion ($N = 200 +$ families) indicate an average alpha coefficient of about .90 on scales. The Parent Self-Check asks similar questions with alpha coefficient across scales of about .87.

Peer behavior measures: Peer Social Skills and Parent Beliefs and Peers—These were completed at the pretreatment assessment by parents and adolescents and were developed by Dishion for use in the FCU. Both assess parent or adolescent perception of good and poor peer behavior. Validity of these questionnaires has been demonstrated in the literature (Bullock & Dishion, 2002; Dishion, Capaldi, & Yoerger, 1999), and alphas are in the 0.61–0.84 range.

CESD—The CESD was administered to parents during the pretreatment assessment. The CESD includes 20 items that ask respondents to indicate how often they have felt a certain way in the past week. Items were scored with a 4-point scale ranging from 0 (*rarely*) to 3 (*most or all of the time*). Coefficient alphas on the CESD for alcohol abusers have ranged from .85 to .90. The CESD is reliable and valid (Radloff, 1977, 1991).

Stressors—At the pretreatment assessment, parents were asked to report on how much nine life stressors have negatively impacted their parenting during the month before their adolescent was incarcerated. Parents could respond that the stressor did not occur, or they could rate the stressors' negative impact on parenting using a 4-point scale ranging from 1 (*no negative impact*) to 4 (*very negative impact*).

FAT—The FAT, which was given as part of the FCU at the pretreatment assessment, included the following structured activities: (a) Parent and adolescent plan an activity (5 min), (b) parent leads a discussion about an adolescent behavior she or he would like to increase and how she or he would encourage the process (5 min), (c) adolescent talks about a time without supervision and parent seeks additional information (5 min), (d) break is offered (5 min), (e) parent leads a discussion on setting limits (5 min), (f) parent and adolescent problem—solve a “hot issue” (5 min).

Activities contain 12–20 items that are rated on a 9-point Likert scale (1 = *not at all*, 9 = *very much*). The following is a sample item: “Does the parent effectively gather important information about the child’s activities?” Results were used as part of the FCU clinical feedback. Raters (therapist and observer) were trained in macroanalytic scoring of items. The FAT can be used to assess several domains, including limit setting, problem solving, monitoring, relationship quality, discipline, and drug use norms. Such macroanalytic procedures have extensive empirical support in the literature and are related to outcomes (Dishion, Andrews, & Crosby, 1995; Dishion et al., 2003; Dishion, Patterson, & Reid, 1988; Panella & Henggeler, 1986). Macroanalytic procedures for this technique have produced alpha levels in the 0.65–0.90 range (Bullock & Dishion, 2002). Average percentage of agreement between raters was obtained across items within each task. Across the five tasks, percentage of agreement ranged from 71.76% to 89.09% for this pilot study. Agreement was defined as ratings within ± 2 on the 9-point Likert scale.

Contemplation Ladder, Drugs (CLD)—The CLD was adapted from the original Contemplation Ladder (Biener & Abrams, 1991), which asks respondents to report on their motivation to quit cigarette smoking. In this study, adolescents filled out the CLD during the pre- and posttreatment assessments. The CLD is a one-item visual analog with 10 rungs (with associated statements) that respondents use to indicate where they are along the Stages of Change (Prochaska & DiClemente, 1992) in regard to their most used illicit substance. The 1st three response options correspond with the Precontemplation stage, the next two response options correspond with the stage of Contemplation, the 6th and 7th response options represent Preparation, the 8th and 9th response options represent Action, and the 10th response option represent Maintenance. In a recent study, a version of the CLD asking about marijuana use was shown to have good concurrent and predictive validity (Slavet et al., 2005).

Brief Situational Confidence Questionnaire (BSCQ)—The BSCQ (Sobell, Cunningham, Sobell, & Agrawal, 1996) asks respondents to report confidence in resisting urges to use substances in eight situations: (a) unpleasant emotions, (b) physical discomfort, (c) pleasant emotions, (d) testing of control, (e) urges and temptations, (f) conflict with others, (g) social pressures, and (h) pleasant times with others. These eight items correspond to the eight scales of the Situational Confidence Questionnaire (Annis & Davis, 1988; Sobell, Breslin & Sobell, 1997). Correlation coefficients between BSCQ items and their corresponding

Situational Confidence Questionnaire subscales ranged from .56 to .80 (Breslin, Sobell, Sobell, & Agrawal, 2000). Adolescents filled out the BSCQ during the pre- and posttreatment assessments. We included one extra situation (school/work) on the basis of the recommendations of Kirisci and Moss (1997). Adolescents rated their confidence to resist urges in these situations on a 5-point Likert scale ranging from 100% (*totally confident*) to 0% (*not at all confident*). The alpha coefficients for BSCQ items administered at pre- and postintervention were .90 and .82, respectively.

Brief Situational Confidence Questionnaire—Parenting (BSCQ–P)—The BSCQ–P was adapted from the BSCQ, and it asked parents to rate their confidence in impacting six different areas: (a) adolescent’s negative behaviors; (b) adolescent’s substance use; (c) parent–adolescent relationship; (d) adolescent’s choice of peers; (e) adolescent’s life in general; and (f) monitoring their adolescent’s activities, peers, and whereabouts. Parents filled out the BSCQ–P during the pre- and posttreatment assessments. The alpha coefficients for BSCQ–P items administered at pre and post intervention were .83 and .74, respectively.

Client Satisfaction Questionnaire (CSQ)—Both adolescents and their parents filled out a CSQ during the posttreatment assessment. This CSQ has been used in previous addictions research (see Stein & Lebeau-Craven, 2002). Item content included: “Was it worth your effort to be in this session today?” “Did the session increase your interest in resources?” “How relevant or meaningful was the session to you?” “Would you recommend this program to a friend?” “How helpful was this discussion compared to discussions you’ve had with other professionals regarding your family?” Items were rated on a 4-point Likert scale, and after reverse scoring, numbers closer to 1 represented negative session evaluation, whereas those closer to 4 indicated positive evaluation. There were also two open-ended questions that asked parents and adolescents to comment on what they liked about the intervention and what they would change about the intervention.

Fidelity and adherence measure—As a fidelity and adherence check, sessions were rated by an observer, the therapist, and parent. Observers and therapists were trained bachelor’s-, master’s-, or doctoral-level staff members and received weekly supervision. Fidelity to treatment was measured by ratings of both therapist behavior and adherence to the principles of MI. There were 15 items measuring therapist behavior that were scored on a 7-point Likert scale. Those items were grouped into the following categories: introduction, assessment, global features, closing, and interaction quality. There were 10 items measuring adherence to MI that were also scored on a 7-point Likert scale. Those items were grouped into categories (on the basis of the FRAMES model; see Miller & Rollnick, 2002) labeled: feedback, responsibility, advice, menu of options, empathy, and self-efficacy. After reverse scoring, items with ratings closer to 1 represented poor treatment fidelity, whereas those closer to 7 indicated good treatment fidelity.

Feedback profile—After engaging the parent and youth in an open discussion regarding the FAT activities, the therapist presented a feedback profile of strengths and challenges on the basis of FAT ratings and information from the preintervention assessment (i.e., peer behavior, stressors, substance use, and depressive symptoms). The feedback profile included four feedback categories: (a) background support, (b) family practices and relationships, (c) peer behavior, and (d) adolescent strengths. Each of those four feedback categories included several profile areas. For example, the peer behavior category included profile areas of positive behaviors, drug use, acceptance, and school involvement. The therapist provided feedback regarding each profile area and engaged the parent and youth in a discussion of whether the particular area being discussed represented a strength and/or a challenge.

Goal setting—After the therapist discussed the feedback profile with parents and youths, they were asked if they would like to set goals for improving their relationship. If parents and adolescents wanted to set goals (all 10 families did), they were provided with a goals sheet that included 21 goals from which they were asked to choose as many or as few goals as they wished. Examples of goals listed on the goals sheet are “establish a reward and punishment system,” “talk to a family counselor,” “contact an organization that can help,” and “increase the frequency of letter writing.” The therapist also asked them to list other goals that they might want to set for the relationship that was not contained on the goals sheet. Dates were set for goals. Barriers to reaching goals were addressed, and possible solutions were generated. Finally, parents and adolescents were shown a resource book that included the names and phone numbers of many local social service agencies and treatment providers. They were encouraged to write down numbers for any services that they may want to contact.

Results

Pre- and Posttests

CLD—During the pretreatment assessment, CLD scores ranged from 4 to 10, with a mean of 7.40 ($SD = 2.27$). During the posttreatment assessment, CLD scores ranged from 5 to 10, with a mean of 8.20 ($SD = 1.48$). As shown in Table 1, adolescents were not statistically significantly more motivated to reduce drug use at postassessment. Effect sizes (ESs) are in the small–medium range in terms of d (Cohen, 1988).

BSCQ—During the pretreatment assessment, BSCQ scores ranged from 16.67 to 97.22, with a mean of 53.89 ($SD = 26.91$). During the posttreatment assessment, BSCQ scores ranged from 44.44 to 100.00, with a mean of 69.17 ($SD = 17.88$). Adolescents were significantly more confident in their ability to resist urges to use drugs at postassessment (see Table 1). This difference can be classified as a medium ES in terms of d (Cohen, 1988).

BSCQ–P—During the pretreatment assessment, BSCQ–P scores ranged from 20.83 to 95.83, with a mean of 67.08 ($SD = 19.98$). During the posttreatment assessment, BSCQ–P scores ranged from 62.50 to 100.00, with a mean of 82.50 ($SD = 12.39$). Parents were significantly more confident in their ability to impact their adolescents’ behavior at postassessment (see Table 1). This difference can be classified as a medium–large ES in terms of d (Cohen, 1988).

Goals Chosen

Goals chosen or generated by these families during treatment generally addressed their deficits ($M = 5$, $SD = .86$). These goals included parent and adolescent having discussions surrounding drug and alcohol use and what it might be like for the adolescent to reduce use, identifying meaningful and enforceable consequences for rule breaking, identifying family resources (e.g., a counselor), having a discussion of what changes parent and adolescent want and what each can do to achieve them, and having a discussion of how negative peers have impacted the family.

Fidelity and Adherence

To measure fidelity and adherence to the treatment, percentages of the total possible score in each of 11 target intervention areas were calculated for the observer, therapist, and parent across the 10 families. As shown in Table 2, we achieved 90% or better adherence in most areas across raters.

To investigate rater agreement, we conducted three percent-agreement analyses comparing rater dyads (observer–therapist, observer–parent, therapist–parent). Responses were

categorized as “agreed” if ratings on a given item were within 1 point on the 7-point Likert scale. Otherwise, they were categorized as “disagreed.” As shown in Table 3, percent-agreement analyses indicated good agreement on all nine target intervention areas across rater dyads. The range of percentage of agreement for items within each of the nine target intervention areas for each rater dyad is also presented in Table 3. More sophisticated methods of investigating interrater agreement could not be used in this study because of sample size constraints and because of the fact that there was limited variability of the ratings of fidelity and adherence (there was a high degree of fidelity and adherence to treatment according to each rater). In cases in which ratings fell below 80%, it is because the parent rated the treatment more favorably. For trained raters (observer and therapist), no ratings fell below 80% agreement.

Satisfaction

Both parents ($M = 47.70$, $SD = 5.19$, possible range = 13–52) and adolescents ($M = 47.30$, $SD = 3.65$, possible range = 13–52) reported a high degree of client satisfaction in this study. For example parents stated, “We learned to communicate with each other a little better” and “This should be a required session before the child is released.” When asked what they liked about the intervention adolescents said, “I liked the whole session because it was neutral ground for me and my mother and it helped me get things off my chest” and “I learned a lot of new things about my mom, I think that’s important for our relationship.” Suggested improvements included making treatment mandatory and conducting more sessions at the start and end of the adolescent’s incarceration.

Discussion

Adolescence researchers have long acknowledged the importance of helping court-involved adolescents within the context of their family (e.g., Alexander & Parsons, 1973). More recently, several interventions targeting families, including the FCU (Dishion & Kavanagh, 2003), have been shown to improve outcomes for adolescents with behavior problems (e.g., multisystemic therapy, functional family therapy, multidimensional family therapy). Most of these interventions work with the family while the adolescent is living at home. Few models exist for engaging the families of incarcerated youths. This small pilot study adds to the literature by investigating the feasibility and usefulness of translating an evidence-based family intervention for use with families in a juvenile correctional facility.

In her review of family interventions with incarcerated youths, Perkins-Dock (2001) discusses several treatment dilemmas that pertain to studies such as this, including dropout and resistance, lack of investment in therapy, and difficulties related to logistics. We experienced no resistance toward our intervention from parents, adolescents, or other juvenile correctional facility staff. All 10 families who were approached agreed to participate, arrived on time for the session, participated fully in the intervention, and were generally satisfied with the intervention. Social workers did not provide us with particularly cooperative families. Rather, we took the first available families. There was a need on the part of the juvenile justice facility where this research occurred to better engage families. Family members often visited youths in the facility and attended treatment planning meetings, but prior to our study, there were no psychosocial interventions occurring that included family members. When social workers were approached and asked to identify families for this study, they enthusiastically referred families, all of whom agreed to participate in our study. It was clear that social workers wished to refer many more families than could be serviced by our small pilot study. On the basis, in part, of our pilot study, individual therapists began to engage more parents in family therapy sessions at the facility. It is possible that the FCU delivered in this study was not met with resistance and/or dropout

because it was brief, nonconfrontational, and desired by participants and the juvenile justice facility.

Another difficulty encountered by therapists working with families of incarcerated adolescents has been lack of investment in treatment (Perkins-Dock, 2001). The FCU was designed to enhance investment in therapy, and we observed that two components of the treatment seemed to work especially well in raising motivation to address difficulties. First, the discussion around feedback from the FAT used in this study gave youths and parents an opportunity to communicate around sensitive issues in a structured manner. Feedback around parental monitoring often led to important discussions between parents and adolescents. It seemed as though youths found it therapeutic to share information about their risky behaviors that they had previously kept secret from their parents. Similarly, parents seemed to gain a deeper understanding of their child's risky behaviors and the importance of making inquiries about the adolescent's activities. On the other hand, providing feedback to parents and youths was a difficult process that required therapists to be honest about strengths and weaknesses while being sensitive to parents' and youths' perspectives. Using an MI approach made giving feedback a more collaborative process rather than the therapist giving expert observations. This collaboration was achieved by continually asking for responses to feedback and providing integrated summaries of multiple perspectives.

Perkins-Dock (2001) cites several studies indicating that youths are often incarcerated far away from home and that the logistics of engaging families of incarcerated youths in treatment at a juvenile justice facility is often difficult. The feasibility of this pilot study was certainly aided by the fact that all parents lived within a 1-hr drive of the facility where their children were being held. However, in some cases parents overcame difficult logistical obstacles to attend therapy. Several parents took time off from work to participate in this intervention. In a more extreme case, one parent who did not have an automobile traveled on two buses for several hours and walked half a mile to attend our intervention.

Although more research is needed, the FCU has the potential to enhance treatment at juvenile justice facilities, engagement in postrelease discharge services, and postrelease family functioning. Parents of incarcerated teens have often experienced their child being removed from their home by the state. However, many of these youths will return home to live with their families. If the juvenile justice system is going to fulfill its mission of rehabilitating youths and protecting public safety, more effort needs to be made to integrate parents into the youths' infacility treatment plan, so that those interventions can be linked to postdischarge planning. This brief treatment is a feasible method of incorporating family treatment into juvenile correctional settings (that often have limited resources).

This study is limited by its lack of randomization or comparison group, its small sample size and use of a sample of convenience. However, pilot studies providing evidence of feasibility and usefulness of an intervention are necessary before more complicated and expensive clinical trials can be undertaken (Rounsaville, Carroll, & Onken, 2001). Another limitation of this study was the fact that advanced statistics (i.e., Cohen's kappa, intraclass correlation coefficients) could not be performed to assess interrater agreement on the FAT or the fidelity and adherence measures because of our small sample size. However, percentage of agreement is a suitable indicator for small pilot studies and can easily be used by clinicians and supervisors in practice settings. Overall, the data collected in this pilot study suggest that a larger clinical trial investigating the efficacy of the FCU with incarcerated adolescents and their families is warranted.

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References

- Alexander JF, Parsons BV. Short-term behavioral intervention with delinquent families: Impact on family process and recidivism. *Journal of Abnormal Psychology* 1973;81:219–225. [PubMed: 4710043]
- Annis, HM.; Davis, CS. Assessment of expectancies. In: Donovan, DM.; Marlatt, GA., editors. *Assessment of addictive behaviors*. New York: Guilford Press; 1988. p. 84–111.
- Biener L, Abrams DB. The Contemplation Ladder: Validation of a measure of readiness to consider smoking cessation. *Health Psychology* 1991;10:360–365. [PubMed: 1935872]
- Breslin FC, Sobell LC, Sobell MB, Agrawal S. A comparison of a brief and long version of the Situational Confidence Questionnaire. *Behaviour Research and Therapy* 2000;38:1211–1220. [PubMed: 11104185]
- Bullock BM, Dishion TJ. Sibling collusion and problem behavior in early adolescence: Toward a process model for family mutuality. *Journal of Abnormal Child Psychology* 2002;30:143–153. [PubMed: 12002395]
- Cohen, J. *Statistical power analysis for the behavioral sciences*. Vol. 2nd ed.. Hillsdale, NJ: Erlbaum; 1988.
- Dennis M, Titus JC, Diamond G, Donaldson J, Godley SH, Tims FM, et al. The Cannabis Youth Treatment (CYT) experiment: Rationale, study design and analysis plans. *Addiction* 2002;97:16–34. [PubMed: 12460126]
- Dishion TJ, Andrews DW, Crosby L. Antisocial boys and their friends in early adolescence: Relationship characteristics, quality, and interactional process. *Child Development* 1995;66:139–151. [PubMed: 7497821]
- Dishion TJ, Capaldi DM, Yoerger K. Middle childhood antecedents to progressions in male adolescent substance use: An ecological analysis of risk and protection. *Journal of Adolescent Research* 1999;14:172–205.
- Dishion, TJ.; Kavanagh, K. *Intervening in adolescent problem behavior: A family-centered approach*. New York: Guilford Press; 2003.
- Dishion TJ, Nelson SE, Kavanagh K. The Family Check-Up with high-risk young adolescents: Preventing early onset substance use by parent monitoring. *Behavior Therapy* 2003;34:553–571.
- Dishion TJ, Patterson GR, Reid JR. Parent and peer factors associated with drug sampling in early adolescence: Implications for treatment. *NIDA Research Monograph* 1988;77:69–93. [PubMed: 3145430]
- Henggeler, SW.; Schoenwald, SK.; Borduin, CM.; Rowland, MD.; Cunningham, PB. *Multisystemic treatment of antisocial behavior in children and adolescents*. New York: Guilford Press; 1998.
- Hogue A, Liddle H. Family-based preventive intervention: An approach to preventing substance use and antisocial behavior. *American Journal of Orthopsychiatry* 1999;69:278–293. [PubMed: 10439843]
- Johnson P, Johnson H. Reaffirming the power of parental influence on adolescent smoking and drinking decisions. *Adolescent & Family Health* 2000;1:37–43.
- Kirisci L, Moss HB. Reliability and validity of the Situational Confidence Questionnaire in an adolescent sample: Confirmatory factor analysis and item response theory. *Measurement & Evaluation in Counseling & Development* 1997;30:146–155.
- Miller, WR.; Rollnick, S. *Motivational interviewing: Preparing people for change*. Vol. 2nd ed.. New York: Guilford Press; 2002.
- O’Leary CC. The Early Childhood Family Check-Up: A brief intervention for at-risk families with preschool-aged children. *Dissertation Abstracts International* 2001;62(06):2992B.
- Panella D, Henggeler SW. Peer interactions of conduct-disordered, anxious-withdrawn, and well-adjusted Black adolescents. *Journal of Abnormal Child Psychology* 1986;14:1–11. [PubMed: 3950211]

- Perkins-Dock RE. Family interventions with incarcerated youth: A review of the literature. *International Journal of Offender Therapy and Comparative Criminology* 2001;45:606–625.
- Prochaska, JO.; DiClemente, CC. Stages of change in the modification of problem behaviors. In: Hersen, M.; Eisler, RM.; Miller, PM., editors. *Progress in behavior modification*. Sycamore, IL: Sycamore Press; 1992. p. 184-214.
- Radloff LS. The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement* 1977;1:119–136.
- Radloff LS. The use of the center for epidemiologic studies depression scale in adolescents and young adults. *Journal of Youth and Adolescence* 1991;20:149–166.
- Rao SA. The short-term impact of the family check-up: A brief motivational intervention for at-risk families. *Dissertation Abstracts International* 1999;59(07):3710B.
- Rounsaville BJ, Carroll KM, Onken LS. A stage model of behavioral therapies research: Getting started and moving on from stage I. *Clinical Psychology: Science and Practice* 2001;8:133–142.
- Sanders NR, Lawton JM. Discussing assessment findings with families: A guided participation model of information transfer. *Child and Family Behavior Therapy* 1993;15(2):5–33.
- Slavet JD, Stein LAR, Colby SM, Barnett NP, Monti PM, Golembeske C Jr, Lebeau-Craven R. The Marijuana Ladder: Measuring motivation to change marijuana use in incarcerated adolescents. 2005Submitted for publication
- Sobell, LC.; Breslin, FC.; Sobell, MB. Substance-related disorders: Alcohol. In: Turner, SM.; Hersen, M., editors. *Adult psychopathology and diagnosis*. Vol. 3rd ed.. London: Wiley; 1997.
- Sobell LC, Cunningham JA, Sobell MB, Agrawal S. Fostering self-change among problem drinkers: A proactive community intervention. *Addictive Behaviors* 1996;21:817–833. [PubMed: 8904946]
- Stein LAR, Lebeau-Craven R. Motivational interviewing and relapse prevention for DWI: A pilot study. *Journal of Drug Issues* 2002;32:1051–1070.
- Substance Abuse and Mental Health Services Administration. TOPPS II: Treatment outcomes and performance pilot studies. Rockville, MD: 2002. Author. Retrieved September 28, 2005, from <http://www.csat.samhsa.gov/Topps2/>
- Teplin LA, Abram KM, McClelland GM, Dulcan MK, Mericle AA. Psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry* 2002;59:1133–1143. [PubMed: 12470130]
- Windle, M. *Alcohol use among adolescents*. Thousand Oaks, CA: Sage; 1999.

Pre- and Posttest Indicators of Change

Table 1

Measure	Pretest		Posttest		<i>t</i>	Effect size (<i>d</i>)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CLD ^a	7.40	2.27	8.20	1.48	-1.50	.35
BSCQ (%) ^b	53.89	26.91	69.17	17.88	-2.95*	.57
BSCQ-P (%) ^b	67.08	19.98	82.50	12.39	-3.92**	.77

Note. *N* = 10. CLD = Contemplation Ladder, Drugs; BSCQ = Brief Situational Confidence Questionnaire; BSCQ-P = Brief Situational Confidence Questionnaire—Parenting.

^aBased on a Likert scale, ranging from 1 = *low interest in change* to 10 = *high interest in change*.

^bBased on percentage of confidence, ranging from 0% = *no confidence* to 100% = *totally confident*.

* *p* < .05.

** *p* < .005.

Table 2
Percentage of Fidelity and Adherence to Treatment Across 10 Families

Intervention area	Observer	Therapist	Parent
Introduction	94.29	92.86	92.14
Assessment	89.29	88.57	92.50
Global	96.19	94.29	99.52
Closing	89.29	87.14	97.14
Interaction	91.43	88.21	90.00
Feedback	96.43	93.57	92.86
Responsibility	92.86	94.29	95.71
Advice	97.14	92.14	97.14
Menu	90.00	88.57	97.14
Empathy	98.57	98.57	97.14
Self-efficacy	92.85	98.57	92.85

Table 3
Percentage Agreement on Fidelity/Adherence to Treatment Across 10 Families

Intervention area	Observer–Therapist		Observer–Parent		Therapist–Parent	
	M	Range	M	Range	M	Range
Introduction	100.00	100–100	85.00	80–90	85.00	80–90
Assessment	92.50	80–100	85.00	70–100	77.50	60–90
Global	96.67	90–100	96.67	90–100	96.67	90–100
Closing	100.00	100–100	80.00	80–80	65.00	60–70
Interaction	95.00	80–100	82.50	60–90	87.50	50–100
Feedback	100.00	100–100	95.00	90–100	100.00	100–100
Responsibility	100.00	100–100	80.00	80–80	90.00	90–90
Advice	95.00	90–100	100.00	100–100	95.00	90–100
Menu	100.00	100–100	80.00	80–80	90.00	90–90
Empathy	100.00	100–100	100.00	100–100	100.00	100–100
Self-efficacy	100.00	100–100	100.00	100–100	100.00	100–100