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Family Behavior Therapy in a Conduct-Disordered and Substance-Abusing Adolescent

A Case Example

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Abstract: The present case study describes a Family Behavior Therapy (FBT) method used to treat an adolescent substance-dependent youth who evidenced co-occurring symptoms of conduct disorder and major depressive disorder. The case example includes a description of the youth's assessment, including mental status, relevant background information, substance abuse history, use of standardized measures and urine drug assay tests, diagnostic impressions, conceptualization, and method of developing the treatment plan. Implementation of the FBT program is fully delineated, including examples of completed therapy worksheets and ongoing assessments of drug use, conduct, school performance, and mood. Results, albeit uncontrolled, indicated significant progress throughout intervention and at 6 month follow-up.

Keywords: family behavior therapy, drug abuse, conduct disorder, alcohol.

1 THEORETICAL AND RESEARCH BIAS

Adolescents who are dually diagnosed with conduct disorder and substance abuse/dependence are difficult to treat because these youth present unique challenges that have yet to be adequately addressed in the empirical literature (Weinberg, Naimah, Rahdert, Colliver, & Glantz, 1998). Indeed, only one controlled treatment outcome study has been published in youth who have been formally dually diagnosed with conduct disorder and substance abuse/dependence (Azrin et al., 2002). Therefore, given the lack of controlled outcome evaluation in this population, the following case exam-

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ple is presented to underscore factors that are relevant to cognitive-behavioral treatment in these adolescents.¹

The program examined incorporates multiple interventions that are aimed at reducing illicit drug and alcohol use and improving youth conduct and family relationships. The program derives from the conceptualization of drug usage as a reinforcer, the use of which is often enhanced by imitation, physiological and situational prompts, the withdrawal of aversive states, and remoteness or uncertainty of the negative consequences (Donohue & Azrin, 2002). This conceptualization has been outlined previously as the basis for the community reinforcement treatment program for alcoholism with adults (see Sisson & Azrin, 1989, for review). As applied to youth with severe conduct problems, the present conceptualization views a strong positive parent-youth relationship as central in remediating problem behaviors, including drug use, just as the community reinforcement treatment approach had emphasized a positive marital relation with the adults. This conceptualization of youth conduct problems has been described in the Reciprocity Counseling program for youth (Besalel & Azrin, 1981), which emphasizes contingency management and positive communication training. The current program is designed to address drug use and associated behavioral problems using several standardized procedures.

Interventions that have addressed impulse control, problem-solving deficits, and communication skills have been found to ameliorate youth problem behaviors (for reviews, see Kazdin, 1987; McMahon & Wells, 1998), particularly family-based interventions (e.g., Besalel & Azrin, 1981; Forehand & Long, 1988; Patterson, Chamberlain, & Reid, 1982; Webster-Stratton & Hammond, 1997). Similarly, although empirical investigation of adolescent drug abuse programs is only in its beginning stages (Liddle & Dakof, 1995), controlled treatment outcome studies of drug abuse in adolescents suggest that behavioral therapies that involve the family or parent(s) are effective in reducing drug use and problems of conduct (e.g., Azrin, Donohue, Besalel, Kogan, & Acierno, 1994; Henggeler et al., 1991; Liddle et al., 1992; Szapocznik, Kurtines, Foote, Perez-Vidal, & Hervis, 1983, 1986).

2 CASE STUDY

PARTICIPANT

The participant, Rye, was a 16-year-old Caucasian male. His responses to a structured diagnostic interview, performed during the initial intake session, indicated that he met *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) criteria for substance dependence, conduct disorder, and major depressive disorder.

EXPERIMENTAL DESIGN

A single case "AB" experimental design was used to evaluate the effects of intervention. Multiple assessment measures of substance use, conduct, and mood were used to repeatedly assess outcome during the month prior to treatment, most of the 12 months of treatment, and the 6th-month posttreatment.

MEASURES

The Beck Depression Inventory (BDI) (Beck, Ward, Mendelsohn, Mock, & Erbaugh, 1961) is a 21-item standardized inventory that measures depression. Scores range from 0 to 63, with higher scores indicating greater depression.

The Parent Satisfaction Scale (PSS) (Besalel & Azrin, 1981) assesses parents' satisfaction with their youth in nine behavioral domains (i.e., communication, friends/activities, curfew, home conduct, dressing, responsibility with money, chores, school/work, habits). Each domain is assessed using a single-item scale, ranging from 0% to 100% happiness. An additional item assesses overall satisfaction, with the adolescent using the same scale. Although reliability and validity of the PSS have not been assessed, a similar measure (i.e., Parent Satisfaction With Youth Scale) has demonstrated adequate psychometric properties (Donohue, Decato, Azrin, & Teichner, 2001).

The Youth Satisfaction Scale (YSS) (Besalel & Azrin, 1981) assesses youth satisfaction with parents across nine behavioral domains (i.e., communication, friends/activities, curfew, home conduct, dressing, responsibility with money, chores, school/work, habits). Each domain is assessed using a single-item scale, ranging from 0% to 100% happiness. An additional item assesses overall satisfaction with the parent using the same scale. Although reliability and validity of the YSS have not been assessed, a similar measure (i.e., Youth Satisfaction With Parent Scale) has demonstrated adequate psychometric properties (Decato, Donohue, Azrin, & Teichner, 2001).

The Revised Behavior Problem Checklist (RPBC) (Quay & Peterson, 1987) is completed by parents to assess youth problem behaviors. The RPBC consists of 89 items (each item ranging from 0 to 2, with higher scores indicating greater problems). Scores may be derived for six scales (i.e., Conduct Disorder, Socialized Aggression, Attention Problems/Immaturity, Anxiety Withdrawal, Psychotic Behavior, Motor Excess). Higher scores indicate greater severity of problem behavior.

A urine sample was obtained from the youth participant during each session under the supervision of a same-gender research assistant to serve as an objective measure of illicit drug and alcohol use. Samples were screened by a trained technician employed in an independent laboratory using an SYVA Emit enzyme amino acid assay technique for the following illicit substances: alcohol, THC (marijuana), cocaine, amphetamines, barbiturates, benzodiazepines, opiates, PCP, and methaqualone. All positive

immunoassay screens were then verified using gas chromatography for alcohol and thin layer chromatography for all other substances. The laboratory (Redwood Toxicology in California) has established an accuracy of greater than 95.5% using this procedure. Conventional cutoffs at or above those typically regarded as positive in routine clinical laboratory work were used in this study.

Reports of the youth participant's frequency of illicit drug and alcohol use were obtained from the youth and parent separately using the Time-Line Follow-Back interview (Babor, Cooney, & Lauerman, 1987; Ehrman & Robbins, 1994; Sobell, Sobell, Klajner, Paven, & Basian, 1986). A calendar for the time period of interest was shown to the youth and parent separately. Significant events (e.g., birthdays, holidays) were marked on the calendar to facilitate recall of the days in which illicit drugs and alcohol were used. After calendars were constructed, Rye and his mother, separately, were asked to indicate on the calendar which days Rye had used illicit drugs and alcohol. When reports of substance use from the parent and youth conflicted, the greater frequency of use reported by the parent or child was used in determining outcome evaluation. One day of substance use was assessed when both Rye and his mother denied his use of the respective substance but the urine drug assay test (see above) indicated that such use had occurred. The Time-Line Follow-Back interview method has been found to correspond closely with official records, and test-retest reliability is good (Ehrman & Robbins, 1994; Sobell et al., 1986).

Arrests. To provide an objective assessment of Rye's criminal activity, official court records were used to verify Rye's frequency of arrests.

3 PRESENTING COMPLAINTS

Rye and his mother were 20 minutes late to the intake session. When asked why they were late, his mother responded, "Rye was arrested today for shoplifting with a friend." Rye immediately responded, "I was there, but I wasn't involved." When asked why she was seeking treatment for Rye, Rye's mother exclaimed, "I don't know what to do with him. He's in trouble with the law, stays out all night, spends his time with the wrong crowd, and uses drugs and alcohol." She further exclaimed, "I don't have a husband to help me with this mess. I've tried to turn him over to the authorities, but they won't help." Rye retorted, "I'm only coming in to get my mother off my back. I don't get along with my parents, and I refuse to listen to my mom."

MENTAL STATUS

Rye was dressed in a T-shirt and jeans and was well groomed. He greeted the examiner with a handshake and was well mannered throughout the interview. His affect was somewhat flat. However, he sometimes rolled his eyes back in response to comments

made by his mother. Although he spontaneously stated to the examiner, "You can't help my situation," he otherwise spoke only when asked specific questions. His memory appeared to be within normal limits, as he was able to recall specific dates and events in his recent past. He demonstrated good eye contact, and he answered questions quickly and without difficulty. No formal thought disorder was indicated. When assessing suicidal ideation, Rye responded, "I would never consider harming myself, but I have had thoughts that I would be better off dead." He admitted to fistfights in his history but stated that he would never consider "seriously hurting or killing anyone." His medical history was unremarkable. Rye denied physical or sexual abuse.

4 HISTORY

Rye's parents were divorced shortly after his birth. As a child, Rye's time with his parents was limited because his mother was preoccupied with her own business, and his father was busy starting a new family without him, according to Rye's mother. Rye moved to Florida from Boston with his older brother and mother when he was 11 years old. Shortly after this move, his mother reportedly experienced a "nervous breakdown" and was hospitalized for 30 days, including 4 months of subsequent outpatient care from a psychiatrist. Throughout his mother's hospitalization, Rye stayed with his maternal aunt in Boston, and his parents did not visit him. Also during this time, Rye was often noncompliant at home and school for the first time. Moreover, he sometimes locked himself in his mother's car for hours when he was distressed. His aunt was lenient with Rye because she felt sorry for him. About a year after his mother was discharged from the psychiatric hospital, Rye moved back to Florida with his mother and brother. Rye experienced difficulties adapting to school, receiving detentions and poor grades, and was noncompliant with his mother. His behavioral problems grew worse with the passage of time. During his sophomore year in high school, Rye experienced a number of stressors. Indeed, he switched schools, and his mother filed for bankruptcy. Rye's mother reported that financial concerns caused her to be "irritable and somewhat depressed." Concomitantly, Rye started to spend more time with delinquent youth, came home late for curfew, and was frequently truant from school. His mother reported that yelling, lecturing, and threatening to send Rye to live with his father, or the authorities, were not effective interventions with Rye. He was arrested for shoplifting for the first time in September of his junior year. Three months later, he was expelled from his high school (i.e., 1 month prior to entering treatment).

SUBSTANCE ABUSE HISTORY.

Although Rye reported current use of marijuana, LSD (i.e., acid), and alcohol at the time of intake, he did not consider this to be a problem. He denied use of other illicit drugs. Rye reported that his first use of marijuana and alcohol occurred at a "get-

together” with his brother and some acquaintances during the middle of his sophomore year in high school. As he met more drug-using friends and “contacts,” frequency of his drug use progressively increased. From the summer of his sophomore year to the time of intake (about 6 months), Rye reported that he had used marijuana nearly everyday, consumed alcohol until intoxication about four times per week (sometimes drinking a case of beer within a few hours), and had used hallucinogens four times. His longest period of abstinence from alcohol during this time was 2.5 weeks (other than irritability, no withdrawal symptoms were reported). Rye reported that he never used illicit drugs without a friend being present, and he usually used illicit drugs at his home when his mother was at work, during parties, and at small get-togethers. Most of his friends were drug users and drug dealers at the time of his initial intake session.

His mother reported no history of substance abuse, delinquency, or psychiatric care in Rye’s paternal family but did report that his maternal grandfather was an alcoholic and her youngest brother was a “recovering substance abuser and troublemaker.” His mother denied a substance abuse history but did admit to drinking alcohol “socially.” Rye reported that his brother had a long-standing history of “serious” drug use.

5 ASSESSMENT

Four clinical interview sessions of 60 minutes’ duration were conducted during the month preceding intervention with Rye and his mother (one scheduled session per week). Sessions were conducted in an outpatient adolescent substance abuse clinic funded by the National Institute of Drug Abuse. The urine drug assay test and the Time-Line Follow-Back procedure were both administered during each session, and the aforementioned assessment questionnaires were administered during the initial session.

Results of baseline assessment are presented in Table 1. As can be seen, during the baseline month, Rye was assessed to use marijuana 13 days, alcohol 5 days, and LSD once. His responses to the BDI (i.e., overall score = 35) indicated that he was severely depressed. Rye’s satisfaction with his mother and her satisfaction with him were consistently low in most areas of their relationship according to the PSS and YSS inventories. However, in the domains of dressing and chores, Rye was relatively satisfied, whereas his mother was very dissatisfied in these areas. Interviews indicated that Rye was not performing chores and “dressing like a delinquent,” according to Rye’s mom. Objective assessment of Rye’s conduct (i.e., court records) indicated that Rye was arrested three times during the baseline month. Conduct problems were also indicated from his responses to the RPBC, particularly in the Conduct Disorder, Socialized Aggression, and Attention Problems/Immaturity subscales.

DIAGNOSTIC IMPRESSIONS

Axis I:	312.20 Conduct Disorder, Mild 296.23 Major Depression, Moderate without psychotic features 304.30 Cannabis Dependence, Moderate 303.90 Alcohol Dependence, Moderate
Axis II:	V71.09 No diagnosis on Axis II
Axis III:	None
Axis IV:	Severity of Psychosocial Stressors: 4 - Severe (enduring circumstances; rejecting parent) and (acute circumstances; arrest)
Axis V:	Current GAF: 45 Highest GAF past year: 70

6 CASE CONCEPTUALIZATION

The etiology of Rye's depression, substance use, and behavioral misconduct will be conceptualized from a social learning perspective, although other factors may have influenced his behavior (e.g., genetic predisposition). Early in his childhood, Rye's mother was busy in her work, and his father "didn't have room for Rye." Thus, generalized reinforcers such as praise and attention from his parents for appropriate conduct were limited. Noncompliance during his mother's hospitalization was maintained by his aunt's failure to consequence Rye's misconduct with appropriate consequences (e.g., positive practice, time out). Thus, prior to his mother's return from her psychiatric hospitalization, Rye was accustomed to obtaining reinforcement for inappropriate behavior (e.g., Rye yells at his brother and his aunt takes him to the movies because she feels sorry for him). His mother's return to the family system brought about sudden inconsistencies in the contingencies of reinforcement that were established, which in turn led Rye to be more confused, depressed, and noncompliant.

His mother's decision to move back to Florida resulted in the loss of Rye's established reinforcers from Boston (friends, aunt, infrequent visits from his father), which led to further upset and depression. His mother was responsible for the removal of these reinforcers, and as reported by Rye, this resulted in his resentment of her. His subsequent adjustment to school in Florida was tumultuous. New environmental stressors included meeting new friends and teachers, financial restrictions (bankruptcy), mother's irritability, and lack of parental supervision (due to his mother having to work long hours). The above-mentioned stressors contributed to coercive interactions between Rye and his mother. In addition, his mother's fatigue from work restricted the times in which she could monitor and consequently reinforce (praise, attention, rewards) Rye's prosocial behavior (e.g., homework). Transferring to a new school, modeling and encouragement from his brother to use drugs with older delinquent peers, social acceptance for engaging in "exciting" delinquent and drug use behavior, "good feelings" that occurred consequent to alcohol and drugs, anger at both parents, and lack of consistently enforced consequences all contributed to his delinquent and drug use behavior.

7 COURSE OF TREATMENT AND ASSESSMENT OF PROGRESS

DEVELOPMENT OF TREATMENT PLAN

Rye's goals for therapy were determined during the last baseline session (fourth assessment session). Rye and his mother were asked separately what each would like Rye to accomplish in therapy. His mother wanted him to obtain abstinence from drugs and alcohol and to associate with a "better crowd." She added, "If these goals are accomplished, everything else will take care of itself." Unlike most adolescents in our program, Rye's goals were unusually consistent with his mother. He wanted to terminate drug use immediately, decrease alcohol use, and "hang out with clean kids." As a long-term goal, Rye stated that he would like to someday attend college.

Rye and his mother were subsequently brought together to specify the aforementioned goals. They were told that Rye's goal to immediately abstain from all illicit drugs was noble but highly unlikely given his history of severe drug use. After subsequent discussion, Rye and his mother agreed that it would be more realistic to expect abstinence from "hard drugs" (i.e., LSD) immediately and abstinence from marijuana within 2 months. The therapist then praised Rye's desire to decrease alcohol use and insisted that Rye make this goal more specific so that his mother could better reinforce his progress on a daily basis. After some reluctance, he agreed to decrease his alcohol consumption to 1 day per week. A second goal of Rye's was to maintain sobriety when drinking alcohol (i.e., less than 1.5 drinks per hour). Rye and his mother were praised for understanding that time spent with delinquent youth increases the likelihood of illicit drug and alcohol use. In response to a prompt from the therapist that this goal should be specified further, Rye stated, "I think I can reduce the time I spend with my drug-using friends by 50% within 2 months." The therapist immediately praised Rye for this response and prompted his mother to show her appreciation. Rye was praised for wanting to attend college, and he was also asked to describe the positive aspects of attending and graduating college. Later, Rye was asked a series of questions to derive specific target behaviors that would enable him to be admitted to college:

Therapist: Rye, what will you do to accomplish your goal of attending college?

Rye: I first have to pass my high school equivalency exam.

Therapist: What would you have to do to pass your high school equivalency examination?

Rye: I would have to go to my prep classes and study until I passed my test.

Therapist: How many days per week would you have to go to prep classes?

Rye: Five days per week. Put that down as one of my goals.

Rye stated that he would like his mother to stop "bitching and nagging me," and his mother added that she wanted him to "listen" to her. Both were told that these goals would need to be specified. When asked what would show them that their communication had improved, both agreed that they would be able to have "pleasant conversations." Fifteen minutes a day of pleasant conversation was subsequently specified as a goal.

Thus, goals were established in the domains of illicit drug use, alcohol use, improving the relationship with his mother, and restructuring his social network. Goals were realistic, positively focused, stressed a team effort in solving the presenting problems, and provided an opportunity to objectively monitor his progress on a daily basis.

SELECTION OF TREATMENT

A 1-year prescriptive intervention program was implemented approximately 1 month after the intake session (see below). Rye received 32 intervention sessions, with the duration of time and frequency of sessions fading with the passage of time (see Table 1). Urine drug assays were performed before each session. The implementation of YSS, PSS, BDI, and RPBC questionnaires were scheduled to occur at the end of each intervention month and 6 month follow-up.²

Cognitive-behavioral intervention was implemented to alter Rye's environment such that he received reinforcement for engaging in behaviors that were associated with abstinence from alcohol and illicit drugs as well as for socially accepted conduct. Specific interventions included (a) reciprocity counseling to enhance communication and mutual exchange of reinforcement between Rye and his mother, (b) a point system to establish consistent consequences for Rye's behavior, (c) a stimulus control intervention to encourage more time with nondelinquent and nonsubstance use associations as well as to assist Rye in spending less time with delinquent and substance-using associated stimuli in his environment, and (d) an urge control procedure to assist Rye in reducing his desire to engage in troublesome activity or drug use. Interventions were chosen to be consistent with the nature of the large-scale treatment outcome study for which this youth was a participant. Most interventions were implemented successively and cumulatively. That is, these interventions were initiated during all sessions, with time spent reviewing each intervention fading with the passage of time. Interventions also became less structured (i.e., less role-play interactions, less therapy assignments, less use of therapy forms) as Rye's skills improved with the passage of time.

TREATMENT PROGRESS

Treatment Session 1 (2 hours). As was the case for the majority of sessions, Rye and his mother attended the first session. Upon entering the therapy office, Rye moved his chair so that he could be positioned away from his mother. As part of the treatment strategy to change their cognitive focus to the positive aspects of their relationship, the Reciprocity Awareness procedure was implemented. First, Rye and his mother were each instructed to draw a line down the middle of a 8 × 11 sheet of paper. On the top left side, each was instructed to write, "Things you do for me that I like," and on the top right side, each was instructed to write "Things I do for you that you like." Rye and his mother were then instructed to complete both lists in reference to each other. Rye was able to come

up with twice as many things that he did for his mother, as compared to things that his mother did for him. To help him increase the number of responses in his list, the therapist provided prompts (e.g., "Information in these lists can include privileges, presents, chores, and favors"). After each of their lists contained several responses, each was instructed to tell the other how an action that was listed in the "Things that you do for me that I like" list was appreciated (e.g., I appreciate how you take out the trash each week). Each was then instructed to verify that an action listed in the "Things I do for you that you like" list was appreciated (e.g., "Do you like it when I drive you to your friend's house?"). If a disclosed action was not appreciated (e.g., mother did not like when the trash was taken to the curb), the therapist instructed the dissatisfied individual to request a change in that behavior using the Positive Request procedure (i.e., succinct request for a specific action, reporting what would be beneficial to the recipient if the request were performed, offer to facilitate that which is being requested, provide an alternative action, ask the recipient for alternative actions). After the components of the positive request procedure were described by the therapist, Rye mentioned that he thought it was not practical to include all of these components when making a request. The therapist subsequently instructed him to practice all components during session but that at home he could use only those components that he felt were necessary. Several responses from both lists were reviewed for each person during this first session (i.e., 25 minutes). Both reported that they liked the reciprocity intervention and requested that future sessions include this component.

After reciprocity counseling, Rye's mother was excused from the room, and the Annoyance Review procedure was introduced to heighten Rye's intrinsic motivation to change his behavior. Rye was asked to describe the negative consequences of his misconduct and illicit substance use (e.g., hangovers, judge would be unimpressed with Rye at his upcoming trial, resulting arguments with his mother). He was then instructed to rate the unpleasantness of each of these consequences using a 0 to 100 scale of "unpleasantness" (0 = *completely pleasant*, 100 = *completely unpleasant*). His ratings were relatively high for LSD and delinquent behavior, moderately high for marijuana, and relatively low for alcohol use. The therapist then asked Rye to review, in depth, the unpleasant aspects of each initial consequence, providing prompts, when indicated ("What's so unpleasant for you about your mother going to court and facing the judge?"). Later, the therapist provided empathy to Rye for having endured these consequences (e.g., "I can see how upsetting and embarrassing it would be for your mother to confront the judge after she swore to him that you would never use drugs again. I know that would be tremendously upsetting for you to see her have to go through that experience"). This Annoyance Review lasted approximately 20 minutes, and Rye appeared to be motivated by the experience, as his postratings of unpleasantness were much higher and his responses indicated that he had never fully explored the negative consequences of his actions.

Rye's mother was subsequently brought back into the therapy office with Rye, and a brief rationale for the point system was provided. They were told that Rye would be given

points for performing drug-incompatible behaviors and that he could later exchange these points for things that he desired from his mother. After this rationale was provided, Rye stated, "My mother will never be able to follow through with that." His mother retorted, "How would you know? You've never been clean for me to show my appreciation." The therapist immediately reminded them that they loved each other and that from now on, they should try their best to "catch the other being good." Several guidelines were spontaneously reviewed by the therapist (e.g., criticism would not be allowed, and instead positive requests would be encouraged; statements would be oriented to enhancing future interactions rather than discussing past misfortunes; no yelling or derogatory comments). After both made a commitment to comply with each of the preceding guidelines, Rye was asked to go to the waiting room to choose from a list of common adolescent reinforcers, which he would like to receive more often from his mother, and to rate each desired reinforcer on a scale from 0 to 100 (0 = *not at all desired*, 100 = *completely desired*; see Appendix A). Rye initially reported that he did not want his mother to be burdened by having to provide him selected reinforcers. Knowing that youth frequently make this comment to avoid commitments to goal-oriented behavior, the therapist insisted that he proceed as directed. Whereas Rye selected the reinforcers to be used in the point system, the therapist and mother reviewed target behaviors that would be included in the point system (see Appendix B). The point system contained five "core" behaviors that were necessary to receive points for the day (i.e., no indication of drug use, on time for curfew, parent informed about whereabouts, attendance at school or work, a 15-minute talk with parent each day). The completion of these five behaviors resulted in Rye earning 1 point. Other points could be earned for performing homework, earning good grades, introducing a clean friend to his mother, attending therapy, and performing various therapy assignments and chores.

When Rye returned, his mother was asked to examine Rye's list of chosen reinforcers and to disclose how often, if at all, she could provide each of these reinforcers if Rye was a "perfect child" (see Appendix A). Point values were then assigned to selected reinforcers. Reinforcers that could be provided on a daily basis cost Rye 1 point, reinforcers that could be provided on a weekly basis cost 7 points, and monthly reinforcers cost 30 points (see Appendix C for reinforcement menu).

For the most part, establishing the point system was relatively routine, lasting approximately 40 minutes. However, in doing so, the construction of curfew times was relatively problematic. Rye's mother reported that for the past couple of weeks, he had come home after the curfew she had set for him. She stated that the curfew was a "joke" to her son because she could not force him to comply. Rye's laughter suggested that the curfew times needed to be mutually established. Therefore, his mother was excused from the room, and Rye was asked to provide curfew times that he would comply with for each day of the week. Typical of most conduct-disordered youth, Rye's suggested times were much later than those suggested by his mother. He was then asked to disclose what he did not like about his mother's responses to his failures to comply with the present curfew. After he listed several reasons (e.g., she nags me, she worries a lot), Rye was told that

his mother would likely continue these annoying behaviors until compliance to a mutual curfew could be arranged. He was also told that it would be a nice gesture for him to lower the curfew times. Rye responded by suggesting earlier curfew times, and the therapist told Rye that he would talk to his mother. His mother was then seen individually to determine if she could agree to stop performing the behaviors that Rye found annoying, if he complied to the curfew times that he suggested. His mother agreed, and Rye was brought back into the office so that both could agree to this contingency.

Also relevant to the point system, Rye's mother was unaware of many indications of drug use. Therefore, she was taught to identify objective signs of drug and alcohol use so that she could monitor these behaviors in Rye (e.g., red eyes, unsteady gait, headaches, stuttering, walking straight to his room without greeting his mother). Rye also volunteered signs of drug use that were particularly relevant to him. Rye rehearsed how he would inform his mother of his whereabouts while he was away from their home, including how he would call his mother to inform her when his plans changed. Rye was instructed to have the appointed teacher at his night school sign a paper to verify his school attendance. His mother was instructed to verify the authenticity of these signatures at the end of each week.

Given that parents have a tendency to be critical during their review of the point system at home, the point system was role-played, with the therapist first modeling appropriate parental responses with Rye in a hypothetical day. Rye's mother was subsequently asked to role-play the point exchange with the therapist portraying the role of Rye in a hypothetical day. Rye's mother started her review by pointing out target behaviors that were not performed adequately and failed to praise performance of target behaviors. Therefore, she was instructed to first praise target behaviors that were performed and simply state when target behaviors were not performed. She reported that this strategy was not representative of her upbringing and that she was concerned that he would not take her seriously if she was "too praiseworthy." She was reportedly "sold" on the idea after the therapist stated that Rye's behavior would probably be influenced most by her consistent enforcement of consequences. Several hypothetical days were then role-played with Rye and his mother to ensure adequate responding. Rye commented that the point system was "fair," although he admitted to having doubts that the procedure would be effective. They were each given the therapy assignment to review the point exchange each night, consistent with the agreed upon contingencies.

The Stimulus Control procedure was implemented during the latter 40 minutes of the therapy session. A list of at-risk people, places, and situations (i.e., associations with alcohol and illicit drug use, troublesome behavior) was constructed with Rye individually. This list consisted of Rye's current friends, his brother, his girlfriend, and various locations and activities in which he had used illicit drugs or alcohol or had engaged in misconduct in the past (e.g., get-togethers, parties, beach). A second list of safe associations was then constructed. This list included past and present people, places, and situations in which troublesome behavior or drug and alcohol use was not reported to occur (e.g., mother, school, work, most relatives, a few friends from his past, participation in

sporting events). Rye appeared very open to discuss these influences and volunteered that he had similar discussions with his mother. Therefore, upon verbal consent from Rye, his mother was invited back to the office, and Rye reported specifically why each stimulus put him at greater or lesser risk to use illicit drugs and alcohol or greater or lesser risk to engage in troublesome behavior. Rye reported that he wanted to gradually spend more time with safe associations but that he thought it would take him time to make this adjustment. His mother was told that it would be important to encourage and assist him in spending more time in safe associations and to help him generate solutions to avoid or cope with difficult situations that involved at-risk associations. They were given the therapy assignment to record his total time spent with each stimulus at the end of every night (see Appendix D). They were told that this procedure would provide an opportunity for his mother to reward Rye for drug-incompatible efforts, to problem solve difficulties with at-risk stimuli, to reinforce his time spent in safe associations, and to plan his time with safe associations. To encourage trust and future disclosure, his mother was told to avoid critical remarks. The recording procedure was role-played with Rye for the previous day, with the therapist first modeling appropriate parental responding. Rye was open about his time spent in at-risk situations. Rye was then instructed to review the point system for the current day with his mother. Rye's mother had to be reminded to avoid criticism throughout their review. She was also instructed to provide advice only when asked to do so by Rye and to focus her efforts on "catching him being good." She reported that she would "do her best" and requested that the therapist provide her with prompts to assist her in this endeavor (e.g., "What did you like about his effort? Did you like it that he trusted you with this information?"). They were assigned to review the stimulus control procedure each night.

Treatment Session 2 (90 minutes). The second session was initiated with a review of progress since the last therapy session. Rye's mother was instructed to praise Rye for abstaining from "hard" drugs. He reported that he used marijuana at a party but did not smoke as much as usual. His mother stated that she was disappointed that he used marijuana but was happy that he was able to comply with the agreed upon curfew times. His mother was reminded that drug abstinence is hard for some people to achieve and that it usually takes 2 months before abstinence is accomplished for most youth with a chronic history of abuse. His mother was then instructed to praise him for his efforts in remaining abstinent for 6 of the past 7 days. Although it is possible that Rye used marijuana several days during the week by praising Rye's reports of abstinence, the therapist indirectly reinforced his commitment to abstain. Consistent with the tenets of Reciprocity Counseling, Rye's mother was instructed to tell Rye several things that were appreciated about him during the previous week (e.g., curfew adherence, telling him about his whereabouts during the evenings). Likewise, Rye was instructed to tell his mother several things that he appreciated about her during the previous week (e.g., rides to school, taking him to a restaurant, following through with reinforcements outlined in the point system).

The point system was reviewed to ensure accurate monitoring of target behavior and appropriate delivery of reinforcement. As might be expected, reinforcers were delivered noncontingently (e.g., cooking meals without the exchange of points). The importance of establishing the agreed upon contingency was discussed. Several points were not earned because Rye and his mother did not maintain the required 15 minutes of conversation due to incompatible schedules. Therefore, they established times that were mutually compatible for discussion and rehearsed a pleasant conversation while the therapist instructed them to practice taking turns asking about each other's interests. The therapist provided feedback during this conversation (e.g., prompts to take turns when conversing). Rye's mother was prompted several times to avoid giving Rye advice during this conversation. Relatedly, Rye complained that his mother spent too much time "prying for information." Rye was told by the therapist that he was responding to her questions with yes or no responses that made it difficult for his mother to maintain the conversation. He was then instructed to respond to questions that he did not want to answer by telling her about something that he wanted her to know about (e.g., things he enjoyed). They were given the assignment to continue to review the point system on a daily basis at home.

The stimulus control procedure was reviewed for the week. As expected, most of Rye's free time was spent in at-risk situations. Rye was praised for his efforts to avoid going to a party during the preceding week. The therapist assisted Rye in generating his own solutions to avoid the situation that resulted in drug use during the week (i.e., problem statement, generation of solutions, listing the pros and cons of each solution, implementing one or more of the solutions). Rye was given an assignment to review his list of at-risk and safe associations with his mother at the end of each day.

Treatment Session 3 (60 minutes). The third session was unremarkable. Rye reported 1 day of marijuana use but did earn points for the preceding week. His mother was praised for following the established contingencies of the point system. Time spent with at-risk items decreased from the previous week, whereas his time spent with safe association items increased.

Treatment Session 4 (60 minutes). Rye reported no use of marijuana or hard drugs during the previous week, and his mother was prompted to praise his 1st week of abstinence from illicit drugs in 9 months. She reluctantly said she was glad he did not use drugs but was disappointed with his having "dropped out" of night school. The majority of the session was spent reviewing the stimulus control procedure, although future academic ambitions were also discussed. Rye stated that he would enroll in "regular" high school during the next fall. He stated that he would attempt to gain employment immediately but refused vocational counseling (i.e., job club). He did, however, agree to learn job-finding skills during the next session if he was unable to secure employment.

Although Rye did not earn any points from the established contingency system because he did not attend any classes or work, he was praised for completing several

chores. Stimulus control was briefly reviewed. His time spent in at-risk situations was markedly decreased as compared with the preceding weeks. The therapist emphasized the relationship between illicit drug abstinence and decreased time spent in at-risk situations. Therapy assignments included the review of stimulus control and point system procedures each night.

Treatment Session 5 (60 minutes). The stimulus control and the point system interventions were reviewed. Rye and his mother did not review these procedures on a daily basis at home but did perform the point exchange at least every other day. Rye spontaneously stated, "I like the stimulus control because she doesn't bitch at me." This suggested his mother was becoming less negativistic in her interactions with Rye. However, observations during the session revealed that she was not adequately reinforcing Rye's positive behaviors. Thus, she was instructed to emphasize her praise for his good conduct and anti-drug-related actions throughout the review of stimulus control. They were assigned to review the point system and stimulus control procedures each night.

Treatment Session 6 (60 minutes). The point system and stimulus control procedures were reviewed, and the Urge Control procedure was implemented for the first time. The Urge Control procedure conceptually was used to terminate illicit drug and alcohol activities by interrupting the very first urge, thought, and action (or other incipient process of that action) to engage in substance-related activity. In the urge control procedure, Rye first discussed options that he could have performed to avoid marijuana use during the preceding week. After options were reviewed, the therapist modeled a temporal sequence of actions involving identification of the first drug-related thought in the drug use situation, terminating this drug-related thought by exclaiming "Stop!" stating two or three negative consequences of drug use, stating the actions that would be necessary to avoid drug use in that situation, and stating the positive consequences of avoiding drug use. Rye performed the urge control exceptionally well and was able to generalize the procedure to several at-risk scenarios. Because Rye did not obtain a job during the past week, the therapist modeled effective job interviewing skills and taught Rye to initiate job interviews over the phone in role-play scenarios. Rye and his mother were assigned to review the stimulus control and point system procedures during the next week, and Rye was given an additional assignment to attempt at least one job interview.

Treatment Sessions 7 to 16 (60 minute sessions). Sessions 7 through 16 contained reviews of the point system and stimulus control procedures. Communication was emphasized during the implementation of these interventions (e.g., reinforcing statements for desired behavior, ability to accept feedback). Each session was initiated with a review of progress since the last contact (e.g., improvements in communication, responsibility, trust). During these sessions, Rye appeared to respond favorably to praise. Career goals were often discussed, which culminated in Rye's enrollment in the Florida Oceanography Services Institute (FOSI), a specialized high school for adjudicated youths. The

program uses a point system and stresses vocational experiences related to oceanography. His mother was frequently instructed to descriptively praise Rye for his accomplishments, and she was taught to provide consequences for Rye's inappropriate conduct with response cost. Rye's frequency of drug and alcohol use was maintained during this period at about once per week, with abstinence occurring during the latter 2 weeks.

Treatment Session 17 (60 minutes). Rye and his brother attended this session. His brother was returning home from college after having "failed out." Rye showed his brother how to perform the stimulus control procedure. During the review of stimulus control, Rye's brother reviewed how he could assist Rye's goal of abstinence from illicit drugs and alcohol intoxication (e.g., avoid alcohol and drug use in Rye's company, hang up on Rye's drug using friends and pushers). Rye showed the therapist his completed point system. He was praised for actions that were performed since the last therapy session. Rye was assigned to include his brother in his evening reviews of the point system and stimulus control procedures with his mother, whenever possible.

Treatment Sessions 18 to 31 (60 minutes each). Sessions generally included Rye and his mother, although Rye infrequently was accompanied to sessions with his reportedly "clean" girlfriend or his brother. Sessions always included a review of the point system and stimulus control. Problem solving was performed during reviews of the stimulus control procedure when drug or alcohol situations were encountered. Rye appeared to be proud of his accomplishments at FOSI, as indicated by his requests for the therapist to call his teacher to discuss his progress and awards. He was heavily praised by his mother and the therapist for his achievements in the FOSI program. Stimulus control reviews at home were replaced with "daily reviews." Rye was taught to schedule his days with drug-free activities using a daily planner during the 29th treatment session. The point system was faded to a quid pro quo behavioral contract during the 30th treatment session. Specifically, contingencies were agreed on as needed, with target behaviors and corresponding reinforcers being specified. Communication skills training was limited to mediating day-to-day problems, as both were satisfied with the exchange of contingent reinforcement for appropriate behavior. Rye's curfew was extended commensurate with his responsibility. Later sessions emphasized progress reviews, as procedural structure was faded out (e.g., monitoring forms discontinued).

TERMINATION

Session 32 (60 minutes). The termination session was performed with Rye and his mother during the 12th month of treatment. The session began with a review of Rye's progress since entering the program. Past stimulus control items were reviewed, and Rye was praised for his efforts to dissociate with nearly all stimuli that were previously associated with drug use and delinquent behaviors. Although the point system was no longer

being used at home, previously established contingencies were reviewed and were found to be occurring naturally. Rye and his mother also discussed Rye's future ambitions to enter college to become an engineer.

OUTCOME EVALUATION PRETREATMENT TO POSTTREATMENT

As can be seen in Table 1, Rye steadily improved in all dependent measures obtained throughout intervention. He demonstrated abstinence from illicit drugs during the last 3 months of intervention. The number of days he used alcohol decreased only somewhat from baseline levels. However, he reported no days of intoxication throughout the latter course of intervention. Depression, according to his responses to the BDI, appeared to indicate nonsignificant levels throughout intervention. Regarding satisfaction in the relationship, both Rye and his mother appeared to be content with the other, as indicated in their greater levels of satisfaction. All measures of Rye's conduct were improved, particularly during the latter 6 months of intervention, according to the responses of Rye's mother to the RPBC.

8 COMPLICATING FACTORS

Due to Rye's dependence on alcohol, inpatient detoxification was considered. However, given his goals to gradually reduce his intake of alcohol, and his compliance to the intervention plan, it was decided to instead closely monitor potential withdrawal symptoms throughout intervention. With the exception of minor irritability, no withdrawal symptoms were evidenced.

Rye's brother was a notorious drug abuser with established drug contacts and a record of illicit conduct. Therefore, the tenets of stimulus control contradict his enlistment in Rye's intervention program. However, he was included for several reasons: (a) Rye's brother volunteered his assistance in helping Rye accomplish his goals, (b) his presence provided opportunities for Rye to model the effective use of intervention techniques for his brother, (c) his inclusion provided opportunities for the therapist to influence his brother's behavior to be consistent with Rye's goals, and (d) exclusion of his brother might result in his attempts to sabotage Rye's therapy.

9 MANAGED CARE CONSIDERATIONS

The National Institute of Drug Abuse was responsible for all costs involved in Rye's intervention since he was a research participant in the aforementioned treatment outcome study. However, it should be mentioned that managed care agencies will typically not support four assessment sessions and 32 intervention sessions. This is particularly problematic for youth, such as Rye, who are from predominately low-income families,

TABLE 1
Number of Sessions and Assessment Scores Across Baseline, Treatment (12 months), and 5.25-Month Follow-Up

<i>Assessment Measure</i>	<i>Baseline Month</i>	<i>Month</i>												<i>Follow-Up</i>
		1	2	3	4	5	6	7	8	9	10	11	12	
Number of sessions	4	4	3	3	3	3	4	3	2	3	1	2	1	1
Number of days using alcohol per month	5	2	7	7	3	3	2	4	2	2	0	3	1	2
Number of days using marijuana per month	13	3	2	5	3	0	0	2	0	1	0	0	0	0
Number of days using LSD per month	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of times arrested	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Beck Depression Inventory	35	—	0	0	0	3	0	1	0	1	0	—	0	0
Revised Behavior Problem Checklist														
Conduct disorder	12	—	2	1	—	0	2	—	2	0	1	0	0	0
Socialized aggression	24	—	16	11	—	10	0	—	4	2	1	1	2	1
Attention problems/immaturity	15	—	6	4	—	6	0	—	0	0	0	0	0	0
Anxiety/withdrawal	4	—	0	1	—	3	1	—	0	0	0	0	0	0
Psychotic behavior	0	—	0	0	—	0	0	—	0	0	0	0	0	0
Motor excess	4	—	4	1	—	0	0	—	0	0	0	0	0	0
PSS communication	20	—	90	80	60	70	100	—	90	100	100	100	100	100
YSS communication	30	—	90	90	90	100	100	—	90	100	100	100	100	100
PSS friends/activities	20	—	40	50	50	80	90	—	90	100	90	90	100	100
YSS friends/activities	0	—	100	100	100	100	100	—	90	100	100	100	100	100
PSS curfew	70	—	0	50	0	90	90	—	70	90	90	90	100	90
YSS curfew	0	—	100	80	80	90	80	—	70	100	100	100	100	100
PSS home conduct	70	—	70	100	100	100	100	—	100	100	100	100	100	100
YSS home conduct	50	—	100	100	100	100	100	—	90	100	100	100	100	100
PSS dressing	40	—	50	100	80	90	100	—	100	100	100	100	100	100
YSS dressing	100	—	100	100	100	100	100	—	100	100	100	100	100	100
PSS responsibility with money	0	—	—	70	50	60	100	—	100	90	100	100	100	100
YSS responsibility with money	0	—	100	70	90	90	90	—	90	90	100	100	100	100
PSS chores	30	—	90	100	100	100	100	—	100	100	100	100	100	100
YSS chores	80	—	100	100	100	90	100	—	90	100	100	100	100	100
PSS school/work	0	—	0	0	0	0	100	—	100	90	50	100	100	100
YSS school/work	0	—	0	100	—	—	100	—	100	100	100	100	100	100
PSS personal habits	30	—	60	90	100	100	100	—	100	100	100	100	100	100

YSS personal habits	0	—	90	100	90	90	100	—	90	100	100	100	100	100
PSS overall satisfaction	40	—	70	60	70	70	100	—	90	100	90	100	100	100
YSS overall satisfaction	40	—	70	60	70	70	100	—	90	100	90	100	100	100

NOTE: PSS = Parent Satisfaction Scale; YSS = Youth Satisfaction Scale.

particularly because we believe these youth evidence clinical complications that necessitate relatively more sessions than is typical in most psychological disorders.

10 FOLLOW-UP

A follow-up progress review conducted 5.25 months after the conclusion of intervention with Rye and his mother, revealed that Rye was employed full-time, and was assessed to have used marijuana two times since the last treatment session and used alcohol approximately two times per month (no days of intoxication were reported). Past at-risk and safe associations from a previously completed stimulus control list and target behaviors from a previously completed point system were reviewed and appeared to be satisfactory. The majority of the session was spent praising Rye for his efforts in refusing to sell cocaine and other drugs at the request of his brother. His mother commented that Rye was a “big help” in removing his brother from their home when his brother was using drugs in the house and refused to leave. Rye graduated FOSI and obtained his GED. His intention to enroll in a small private school for computer technology and electronics (National Education Center, Bauder College) was reviewed.

11 TREATMENT IMPLICATIONS OF THE CASE

The experimental design used to evaluate the effects of intervention for this youth does not permit the drawing of definitive conclusions. However, this case provides a good example of how multiple standardized assessment and intervention procedures may be used in combination across the course of intervention in a severely troubled youth. Motivational techniques stressing praise for nondelinquent ambitions, and review of past misfortunes due to delinquent behavior were effective in helping Rye improve his initial standards of conduct. The point system provided structure to practice contingency management and improve the exchange of reinforcement between him and his mother. Relatedly, improvements in behaviors that were originally targeted in the point system were found to generalize after the point system was terminated. The stimulus control procedure helped to reconstruct Rye’s social network to include a greater proportion of nondelinquent, and nonsubstance abusing, friends and activities. This procedure also provided Rye an opportunity to practice problem-solving and communication skills in a supportive environment, as he received appropriate feedback for drug-related and non-drug-related behavior. Drug dealers and “heavy” users were faded out, and abstinent nondelinquent activities and persons were incorporated. Communication skills training was effective in eliminating aversive consequences resulting from coercive interactions that interfered with his mother’s provision of reinforcement for Rye’s nondelinquent behavior. Last, his mother’s application of behavioral techniques appeared to improve her ability to fairly consequence Rye’s behavior.

12 RECOMMENDATIONS TO CLINICIANS AND STUDENTS

We strongly recommend that clinicians and students follow empirically supported interventions, such as the intervention program reviewed here, when treating conduct-disordered and substance-abusing youth. These youth do appear to be somewhat responsive to intervention, although significant gains in therapy may be slow to develop. As indicated in this case example, progress in therapy is often variable, as youth may experience relapses, and exacerbations in delinquent behavior. Therefore, it is important to establish realistic goals for therapy initially and continue to support these youth when problems occur at home so they are reinforced to attend therapy.

APPENDIX A Adolescent List of Benefits^a

<i>Suggested List of Benefits</i>	<i>Youth Desire (0 to 100)</i>	<i>How Often Could Parent Provide Benefit?</i>
Use of car for ___ hours	100 (5 hours)	Weekly; must return before 10 p.m.
___ dollars	90 (\$10.00)	Weekly; \$10 maximum per week
Paid school lunch	30	Daily
Favorite dessert	40	Daily
Sleep over	0	NA
Buy a pet	0	NA
Wash laundry	40	Weekly
___ miles of transportation	50 (20 miles round trip)	Weekly
Scuba, sport, or fitness membership	70 (weight lifting gym)	Monthly; less than \$25 per month
Party	100 (mom gone, provides food)	Monthly; in room, come out if smell pot, etc.
Trip to _____ with family	80 (Disney World, bring girlfriend)	Monthly; Rye sleeps in cot
Parents do _____ chore	90 (week without chores)	Monthly
___ minutes of long distance phone calls	0	NA
Cell phone	0	NA
___ cell phone payments	70 (1 month)	Monthly
Eat out at favorite restaurant	65 (Disalvos, anything on menu)	Monthly
CIDs or other presents	90 (give \$20)	None, if give \$20
Privacy time	50 (do not come into room)	Daily, if Rye is alone
Curfew extended to _____	100 (3:00 a.m.)	2 months abstinence from drugs
Rock concert	85 (my choice)	Monthly; must approve band

a. Adolescents, please rate how much you would like to receive each benefit that is listed in the left column (0 = *no desire*, 100 = *complete desire*). Also include benefits that may not have been listed in the bottom left column. Parents, how often could you provide each benefit if your child was perfect (daily, weekly, monthly)?

APPENDIX B

Point System Recording Form of Target Behaviors

Target Behaviors	M	T	W	Th	F	Sa	S	M	T	W	Th	F	Sa	S
Attended all classes at school (earn a check)	c	c	c	c	c	c	c							
No signs of illicit drug or alcohol use (earn a check)	c	c	c	c	c	c	c							
15 minutes with mother during the day (earn a check)	c	c	c	c	c	c	c							
Parent informed about whereabouts (earn a check)	c	c	c	c	c	c	c							
On time for curfew (earn a check)	c		c	c	c	c	c							
10 minutes of homework (earn 1 point)			1				1							
A/B on a report card (earn 14 points)							28							
A/B on a test or quiz (earn 3 points)							7							
Introduce a clean friend to mother (earn 1 point)	1													
Counseling (earn up to 3 points)			3											
Stimulus control reviewed at home (earn 1 point)	1	1	1		1	1	1							
30 minutes of exercise (earn 1 point)		1												
Mow lawn = 2 points, do laundry = 1 point, wash dishes = 1 point, all other chores negotiable			2		1	1								
Daily point total	3	0	8	1	3	3	8	0						
Less points exchanged for rewards	2	0	8	2	0	3	0	7						
Cumulative total of points earned	1	1	1	0	3	11	4							

NOTE: M, T, W, Th, F, Sa, S = Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday, respectively; c = checkmark.

APPENDIX C

Reinforcement Menu

Daily benefits

1. lunch = exchange 1 point
2. dessert = exchange 1 point
3. privacy in room = exchange 1 point
4. \$1 = exchange 1 point
(\$20 maximum per month)

Weekly benefits

1. laundry = exchange 7 points
2. 5 hours with car = exchange 7 points
3. ride within 10 miles = exchange 7 points

Monthly benefits

1. weight lifting membership = exchange 28 points
2. Disney trip = exchange 28 points
3. party = exchange 28 points
4. no chores for week = exchange 28 points
5. 3 a.m. curfew = exchange 56 points

APPENDIX D
Stimulus Control Recording Form

Item	Minutes With Safe Associations							Item	Minutes With At-Risk Associations						
	M	T	W	Th	F	Sa	S		M	T	W	Th	F	Sa	S
Mom	8	5	5	8	8		3	Gord							
Uncle			3					Kevin							
School	8 hours	8 hours		8 hours	8 hours			Paul			120				
Work							8 hours	Jesse			30				
Restaurants					60			Heather			15				
Tom								Parties			180				
Jennifer								Get-togethers	40	60					
Leah								\$300	8 hours						
Jesse	1 hour						10	Alcohol							2 hours
Vicki								Concerts							
Basketball								Angry							
Shopping		20						Joy riding							
Riding motorcycle	1 hour							Clubs						4 hours	
Chores		20			20			Staying out late							
Total daily time	10 hours, 8 minutes	8 hours, 45 minutes	8 minutes	8 hours, 8 minutes	9 hours, 28 minutes	0	8 hours, 13 mintues	Total daily time	8 hours, 40 minutes	1 hour	5 hours, 45 minutes	0	0	4 hours	2 hours

NOTE: M, T, W, Th, F, Sa, S = Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday, respectively.

NOTES

1. Some of the data from the present case example were included in a previous controlled treatment outcome study of adolescent substance abusers (Azrin, Donohue, Besalel, Kogan, & Acierno, 1994).
2. A 6-month follow-up was scheduled at posttreatment, but due to difficulties in scheduling, the initial follow-up was performed at 5.25 months.

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