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What Adolescents Need to Prevent Relapse after Treatment for Substance Abuse: A Comparison of Youth, Parent, and Staff Perspectives

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Abstract

Objective—Little is known about what factors and supports youths identify as important for their sustained recovery after substance abuse treatment, and if their caregivers and treatment staff identify similar needs. The purpose of this study was to explore what youths, caregivers, and staff perceive as important to remain substance free after completing a residential treatment program.

Methods—Semi-structured interviews were conducted with 28 adolescents, 30 parents, and 29 staff at 3 treatment agencies. Data were coded thematically and themes were organized by respondent type.

Results—There was high frequency and concordance across respondents regarding the need for aftercare services, supportive relationships, and activities. Only one item, outpatient treatment, demonstrated significant differences across groups.

Conclusions—External supports and activities are important to recovery of adolescents from substances following treatment completion. Implications and potential areas of inquiry are discussed.

Keywords

abstinence; adolescent substance abuse; posttreatment services; substance abuse

INTRODUCTION

The field is replete with evidence that adolescent substance abuse can be treated successfully (e.g., Godley, Passetti, Funk, Gamer, & Godley, 2008; Hogue & Liddle, 2009; Kaminer, Burleson, & Goldberger, 2002; Waldron & Turner, 2008), and completing treatment is predictive of abstaining from drug use post care (Williams, Chang, & The Addiction Centre Adolescent Research Group, 2000), yet the majority of youths who finish services

eventually relapse (Chung & Maisto, 2006; Godley, Kahn, Dennis, Godley, & Funk, 2005; Ramo & Brown, 2008; Wagner, 2008). Specifically, half of youths are estimated to relapse within three months of finishing treatment (Latimer, Newcomb, Winters, & Stinchfield, 2000), while approximately two-thirds (62% and 68%) of youths relapse six months post care respectively (Gardner, Godley, Funk, Dennis, & Godley, 2007).

Sustaining recovery after completing substance abuse treatment is critical for reducing the onset and/or exacerbation of adversities associated with adolescent substance abuse, including academic and peer-related difficulties, engagement in high-risk behaviors and delinquent acts (American Academy of Child & Adolescent Psychiatry [AACAP], 2008; Dembo, Wareham, Poythress, Meyers, Cook, & Schmeidler, 2007; Powers, 2007; Sussman, Skara, & Ames, 2008; Teplin, Abram, McClelland, Washburn, & Pikus, 2005), and future interpersonal problems, violence and gang involvement, lower occupational and educational attainment, and increased risk of premature death (Fergusson & Boden, 2008; Fergusson, Boden, & Horwood, 2008; Segal & Stewart, 1996).

Over the past 20 years, researchers have investigated the mechanisms associated with relapse and maintaining abstinence (Brandon, Vidrine, & Litvin, 2007; Godley et al., 2005). Although the bulk of this literature focuses on adults (Ciesla, Valle, & Spear, 2008), more attention is focusing on substance abuse during adolescence as distinct in its own right, and as a problem that differs from adult abuse in several key ways (e.g., precipitants, duration, severity of use, and associated costs) (see Chung & Maisto, 2006, for a review). Furthermore, although adults and adolescents share some similarities, there are qualitative differences regarding the precipitants associated with relapse between the two groups; for example, adolescents most commonly relapse due to social and peer pressures, while adults relapse due to internal psychological difficulties or interpersonal issues (Chung & Maisto, 2006; Ramo & Brown, 2008).

Pretreatment Factors

Reviews of this literature tend to group factors into one of three categories: pretreatment, during treatment, and posttreatment (Chung & Maisto, 2006). Drawing upon the extant literature, Anderson, Ramo, Schulte, Cummins, and Brown (2007) conceptualize pretreatment factors along four domains: (1) *background variables* (e.g., demographic characteristics such as age, race, gender, and socioeconomic status); (2) *pretreatment substance abuse*; (3) *environmental influences*, including parental and peer substance use, perceived support, and family connectedness; and (4) *personal characteristics*, such as comorbidity, type of psychiatric difficulties, motivation to abstain, and coping skills.

While the association between relapse and demographic characteristics including age and gender fluctuates across studies of adolescents (Anderson et al., 2007; Williams et al., 2000), other pretreatment factors including comorbid mental health disorders (Anderson et al., 2007; Cornelius et al., 2004; Tomlinson, Brown, & Abrantes, 2004; Yu, Buka, Fitzmaurice, & McCormick, 2006), extensive use of substances prior to treatment (Williams et al., 2000), and low motivation to alter one's use are consistent indicators of relapse among adolescents post care (Kelly, Myers, & Brown, 2000; King, Chung, & Maisto, 2009; Maisto, Chung, Cornelius, & Martin, 2003). Moreover, key social influences including family (Myers, Brown, & Mott, 1993; Williams et al., 2000) and peer substance use (Godley et al., 2005; Williams et al., 2000), peer pressure to use (Myers & Brown, 1996; Ramo & Brown, 2008), and perceived lack of support from family and friends (Williams et al., 2000), have been amply documented as pivotal factors in an adolescent's risk of relapse after treatment.

Factors during Treatment

Familial involvement in treatment (Shoemaker & Sherry, 1991), longer length of treatment (Latimer et al., 2000; Winters, 1999), and finishing treatment are associated with maintaining sobriety after services (Williams et al., 2000). In addition, a range of therapeutic approaches including family therapy (e.g., multisystemic therapy, functional family therapy) (Henggeler, Pickrel, Brondino, & Crouch, 1996; Hogue & Liddle, 2009; Waldron & Turner, 2008), and cognitive-behavioral therapy in both individual and group modalities (Kaminer et al., 2002; Waldron & Turner, 2008) have been associated with abstinence after treatment completion among adolescents.

Posttreatment Factors

Posttreatment factors include both internal and external attributes such as self-efficacy (Burlinson & Kaminer, 2005), self-esteem (Richter, Brown, & Mott, 1991), coping skills related to maintaining abstinence (Myers et al., 1993), ongoing dedication to not use (Kelly et al., 2000), and engaging in activities that don't involve substances (Myers et al., 1993).

Furthermore, although some have questioned the appropriateness of 12-step groups for adolescents because these groups are predominantly populated by adults, and given the qualitative differences between adolescent and adult substance use and factors associated with relapse (Kelly & Myers, 2007), a strong body of research shows the benefits of aftercare programs such as 12-step programs (e.g., Chi, Kaskutas, Sterling, Campbell, & Weisner, 2009; Kelly, Brown, Abrantes, Kahler, & Myers, 2008; Kelly & Myers, 2007; Kelly et al., 2000; Sterling, Chi, Campbell, & Weisner, 2009; Sussman et al., 2008), especially those that blend 12-step principles with adolescent-specific components (e.g., a family therapy, group treatment for problems with peers and sexual issues, extracurricular activities) (Winters, Stinchfield, Latimer, & Lee, 2007), support groups (Cisela, Valle, & Spear, 2008), and continuing care programs (Godley, Godley, Dennis, Funk, & Passetti, 2002) for maintaining recovery after the cessation of professional treatment.

The present study builds upon previous work by exploring what factors youths, their caregivers, and agency staff perceive as important for maintaining recovery after treatment. This study departs from most of existing literature by exploring this subject from the adolescent's perspective, whose voice has been relatively silent in the literature. Gathering firsthand accounts from youths who are in recovery may uncover additional information about how to help adolescents remain substance free after completing treatment. In addition, exploring multiple viewpoints across consumers and providers is valuable for uncovering key similarities and differences among respondents and gathering a more comprehensive understanding of how to support adolescents after treatment. Parental beliefs are particularly salient because as their child's caretaker, they are generally responsible for the youth's health and well-being and may promote various supports depending upon their beliefs. Moreover, as overseers of the child's treatment, residential providers' perspectives can influence what youths and caregivers view as important to the adolescent's recovery.

METHODS

Research Design

These data are from a qualitative needs assessment of substance abuse treatment agencies to identify the experiences, beliefs, needs, treatment barriers, and treatment preferences of adolescents, their families, and staff across three residential substance abuse treatment programs. Two of the treatment programs were publicly funded, and the third was funded through public and private means.

Sample

The final sample consisted of 87 total participants: 28 adolescents who were currently receiving residential substance abuse treatment, 30 parents or primary caretakers, and 29 agency staff. Youths were between 15 and 21 years of age (mean = 17.1, $SD = 1.48$) and overwhelmingly male (86%). More than three-quarters of youths self-identified as Caucasian ($N = 67$, 77%), followed by 17 (20%) youths of African-American descent, and 3 (3%) individuals who identified as Hispanic. Treatment length ranged from 1 to 15.5 months.

Most caregivers were female (77%) and the youth's biological parent; 1 caregiver was the child's grandmother and primary caregiver. Generally, 1 parent was interviewed per youth, although in 4 cases 2 parents were interviewed together, resulting in 26 interviews among 30 parents. When 2 parents were interviewed together, their statements were counted separately.

Finally, staff interviews focused on direct-care treatment and counseling staff were interviewed ($N = 17$), and also included clinical and agency directors ($N = 7$) and other ancillary staff (e.g., nurse, administrator; $N = 5$).

Procedures

Starting in April 2007, directors at two sites and an agency administrator at the third site approached parents through multiple outreach methods (e.g., during normally scheduled meetings with caregivers for the child, by phone, and at weekly parents' nights) to invite parents to participate in the study. They announced the project and provided parents with written information about the study. If caregivers expressed an interest in participating, staff scheduled meetings at the agency for parents to meet with a member of the research team. During this meeting, the study was described in more detail and informed consent was secured. Caregivers also were asked for permission for their adolescent to be approached. If they agreed, a member of the research team met with the youth, described the study, and obtained the adolescent's assent (if under 18) or consent (if over 18) to participate. Of the youths and caregivers who were invited to participate, one child refused and was not consented. In addition, five parents initially consented to participate but were unable to be contacted for an interview.

Staff enrollment followed a similar procedure. Specifically, the directors and agency administrator announced the study at the general staff meeting, and staff who expressed interest were contacted by the research team, who described the study further and obtained informed consent.

Youths, caregivers, and staff participated in 90-minute face-to-face interviews at the treatment center or alternately, by phone if the caregiver was unable to attend an in-person meeting. Caregivers and staff were compensated \$25 for their time in cash or gift card depending on agency regulations and policies. Adolescents were also given a \$25 gift card for their participation in the study. Interviews concluded in January 2009.

Measures

Three semi-structured interview guides were developed for each set of interviewees (youths, parents, staff) by one of the authors (Wisdom). Content was similar among versions, and focused on the types of problems that youths evidence, prior treatment history, circumstances involved in the present use of services, transitions prior to entering services, and future plans after treatment. Responses to the following questions from the interview guides were analyzed for the present study:

1. Youth: What kinds of things do you think you will need when you leave treatment to keep you healthy and away from substance abuse?
2. Parents: What kinds of things do you think [your child] will need when [child] leaves treatment to keep him or her healthy and away from substance abuse?
3. Staff: What kinds of supports do clients need when they leave treatment?

Data Analysis

Interviews were tape-recorded and transcribed verbatim. We analyzed interviews using the Atlas.ti 5.2 software, which aids in coding, organizing, and retrieving qualitative data (Muh, 2004). Four coders coded the interviews, and consensus was sought to ensure consistent and reliable data. Any disagreement with codes was discussed until consensus was met. Final coder agreement for text related to these questions was 90%. After coding was completed, we reviewed all coded material related to factors needed to sustain treatment gains. Interpretations were refined through an iterative process in which we organized data into broad categories and then modified the categories as analysis continued. Once these categories were finalized, we conducted Fisher's exact tests for each category individually in order to determine if there were significant differences in responses between adolescents, parents, and staff.

RESULTS

Analysis of data gathered from 87 interview participants yielded 159 unique responses about what adolescents need to sustain their recovery from substance abuse. The number of responses given by each group was roughly the same: Adolescents ($N = 28$) provided 57 answers, an average of 2.04 answers per respondent; parents ($N = 30$) provided 53 answers, an average of 1.77 answers per respondent; and staff ($N = 29$) provided 52 answers, an average of 1.73 answers per respondent. The responses provided by adolescents, parents, and staff could be divided into four major areas that predominantly fell into either pre- or posttreatment categories:

1. aftercare-related needs (e.g., outpatient treatment, 12-step groups),
2. relationships with peers and family, including the need for their support, positive peers, and someone to talk to,
3. non-drug-related environments and activities such as school, work, hobbies, and religion, and
4. internal processes, including the need to focus, achieve emotional stability, and maintain commitment to the program.

There was also a fifth category of miscellaneous responses that we included because they were given by more than one interviewee. See Table 1 for a summary of responses.

Aftercare Programs

Aftercare-related needs (e.g., outpatient treatment, 12-step programs) was the most commonly reported category across respondents. Specifically, more than three-quarters of the sample ($N = 23$, 79.13%) cited either outpatient treatment ($N = 34$; 39.08%) or attendance at 12-step programs such as Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) ($N = 16$; 18.39%) as important to maintaining abstinence. Analysis by respondent type revealed 19 staff (65.52%), 9 parents (30.00%), and 6 adolescents (21.43%) cited outpatient treatment, while 8 youths (28.57%) and only 4 staff (13.79%) or parents ($N = 4$, 13.33%) cited AA/NA programs as factors that would assist adolescents following the

completion of residential treatment. Differences in aftercare-related needs among adolescents, parents, and staff were significant for outpatient treatment ($p < .0017$) but not significant for attendance at 12-step programs such as AA or NA.

Peer and Family Factors

After aftercare, peer and family relationship factors (e.g., support, healthy influences) was the most frequently cited category across the sample. Within this group, all three groups reported that support (adolescents, $N = 7$, 25%; parents, $N = 9$, 30.00%; staff, $N = 10$, 34.48%) was important for remaining substance free post treatment. Most of the adolescents who cited the need for support (5 of 7, 71%) mentioned needing family support specifically.

Adolescents also cited positive peers with the same frequency as the need for support ($N = 7$, 25.00%), expressing their need for “positive friends” who would help them “stay away from the streets... [and from] negative friends.” Fewer caregivers ($N = 5$, 16.67%) and staff ($N = 2$, 6.90%) cited healthy peers, although this need was cited most frequently after the need for support. In contrast, staff were more likely to cite that adolescents need someone to talk to ($N = 4$, 13.79%) than that they need positive peers. However, there were no significant differences between respondent type for any subcategory within relationship factors.

Non-Drug-Related Environments and Activities

Adolescents and parents also provided multiple answers regarding the value of drug-free structured environments and activities in the posttreatment phase of recovery from substance abuse. Each group provided 25 responses in total, with the highest number of responses related to being in school or working ($N = 8$ for both parents and adolescents). Six parents (20.00%) and 4 adolescents (14.29%) also noted hobbies and structured time as important. Despite the many responses given by parents and adolescents in this category, very few staff spoke about non-drug-related environments and activities as a critical part of maintaining abstinence. Only 4 staff (13.79%) mentioned being in school or working, while 2 staff (6.90%) mentioned hobbies and structured time and 2 staff (6.90%) mentioned positive peers. No differences between respondents were found to be statistically significant.

Internal Processes

In contrast to the preponderance of responses concerning aftercare, peer/family factors, and activities, internal processes were cited relatively infrequently across respondents ($N = 11$, 13%). However, adolescents were more likely to report these processes ($N = 6$, 54.55%) than parents ($N = 4$, 36.36%) and staff ($N = 1$, 9.09%). Adolescents provided responses in all sub-categories of this area but mentioned focus and commitment to the program (both $N = 2$; 7.14%) most frequently, with 1 adolescent noting that he had to “continue to be focused” and maintain the “right state of mind.” Meanwhile, parents only noted focus and emotional stability, and relatively few parents cited either factor (both $N = 2$; 6.67%), while staff mentioned only focus ($N = 1$; 3.45%). None of the differences between respondent groups reached statistical significance.

In addition to these three main categories of answers, there were additional responses that were given by more than one interviewee and are worth mentioning. Three staff ($N = 10.34\%$) and 1 adolescent (3.57%) talked about the need for parents to set rules and have higher standards for their children. As one staff member remarked, “I think the biggest thing parents need from us is to know and to realize they’re still parents.” Two staff ($N = 6.90\%$) also believed that parents needed more information about the services in their community, but no parents or adolescents mentioned this need. Finally, 2 parents ($N = 6.67\%$) and 1 adolescent ($N = 3.57\%$) endorsed the view that they would not need anything once they

completed residential substance abuse treatment. These responses did not demonstrate statistically significant differences between adolescents, parents, and staff.

DISCUSSION

Consistent with the literature, the main findings of this study suggest that youths see 12-step programs, engagement in non-drug-related activities (e.g., school, job), and their relationships with peers and family as important for maintaining abstinence after discharge from residential treatment. Furthermore, adolescents, their parents, and staff were primarily concordant in what they believe youths need in order to maintain their recovery upon discharge. Specifically, most responses across groups fell within three categories; aftercare needs, relationships, and drug-free activities. High concordance across respondents and with the extant research is encouraging, as it suggests youths, their families, and the providers overseeing their care are in general agreement about factors that have strong support within the literature as aiding in recovery.

Although there was general consensus about what adolescents need to continue their recovery from substance use, some differences within categories emerged. Within the overall category of aftercare, for example, staff overwhelmingly cited outpatient treatment beyond 12-step programs as necessary to reduce the risk of relapse. In fact, two-thirds of staff believed that this was an important factor in the adolescent's ongoing recovery. In contrast, only 4 staff believed 12-step programs were needed in order to continue the youth's recovery post care, unlike youths, who cited AA/NA programs more than any other factor except school and/or work activities as integral to their recovery.

That staff did not identify 12-step programs with any significant frequency might be indicative of concern that these groups may not be the most appropriate form of aftercare for youths. However, that youth responses were heavily in favor of these groups suggests that they perceive them as useful to their recovery. In light of these findings and the extant literature about their effectiveness among adolescent populations (Kelly et al., 2008), and particularly over the long term (Winters et al., 2007), more research is needed to explore why adolescents prefer these programs to outpatient treatment, and to better understand staff concerns and beliefs about 12-step programs that resulted in their low endorsement.

Finally, it is noteworthy that only 11 participants across groups cited internal factors such as the need to focus, remain disciplined, and committed in order to remain abstinent post-treatment. Such results are dissimilar from the extant literature, which has shown that individual processes including lack of motivation and low commitment to change (Kelly et al., 2000; King et al., 2009; Maisto et al., 2003) lower the likelihood of remaining substance free posttreatment. While one may speculate that this finding could be due to treatment-specific factors (e.g., perhaps treatment focused upon more external factors, such as the need to form new relationships and drug-free activities, than emphasizing internal processes such as cognitive skills and coping strategies), further exploration is needed to better understand whether the strong trend toward external factors across respondents (e.g., outpatient treatment, 12-step programs, school or job, support of family and peers) was unique to this study, or if there is a shift in how consumers, their families, and providers are viewing recovery from substances among adolescents from internal processes to environmental factors.

Several limitations warrant consideration when interpreting these results. First, the small sample sizes preclude generalizing these results to the wider population of adolescents receiving treatment for substance abuse, their caregivers, and treatment staff. Future research with larger samples may provide additional insights into the factors that these

groups perceive as important to remain substance free after completing a residential treatment program. Furthermore, as youths had not yet been discharged from their treatment program, it is unclear whether the factors that adolescents, their parents, and staff cited as integral to the recovery process will in fact be associated with abstinence upon discharge. In addition, all of these youths were receiving residential care; thus, more research is needed to determine whether the responses cited were specific to this sample, or common themes among adolescents who both vary in their recovery from substances and are treated through different venues (e.g., outpatient care, day treatment, residential care).

Despite these limitations, however, these findings appear to support what is known about the importance of support, structured, substance-free activities and the need for aftercare services, while calling for further investigation into whether adolescent beliefs are concordant with actual factors that facilitate recovery from residential treatment post care. In addition, more knowledge is needed to determine if caregivers provide the supports they have identified, and to better understand the rationale behind the discrepancy between type of aftercare services (12-step or outpatient treatment) among youths and providers in order to respond to the needs of adolescents after they complete treatment and to support their long-term recovery from substance abuse.

REFERENCES

- American Academy of Child & Adolescent Psychiatry (AACAP). Teens: Alcohol and other drugs. 2008. Retrieved from http://www.aacap.org/cs/root/facts_for_families/teens_alcohol_and_other_drugs
- Anderson KG, Ramo DE, Schulte MT, Cummins K, Brown SA. Substance use treatment outcomes for youth: Integrating personal and environmental predictors. *Drug and Alcohol Dependence*. 2007; 88:42–48. [PubMed: 17092659]
- Brandon TH, Vidrine JI, Litvin EB. Relapse and relapse prevention. *Annual Review of Child Psychology*. 2007; 3:257–284.
- Burleson JA, Kaminer Y. Self-efficacy as a predictor of treatment outcome in adolescent substance use disorders. *Addictive Behaviors*. 2005; 30:1751–1764. [PubMed: 16095844]
- Chi FW, Kaskutas LA, Sterling S, Campbell CI, Weisner C. Twelve-step affiliation and 3-year substance use outcomes among adolescents: Social support and religious service attendance as potential mediators. *Addiction*. 2009; 104:927–939. [PubMed: 19344442]
- Chung T, Maisto SA. Relapse to alcohol and other drug use in treated adolescents: Review and reconsideration of relapse as a change point in clinical course. *Clinical Psychology Review*. 2006; 26:149–161. [PubMed: 16364524]
- Cisela JR, Valle M, Spear SF. Measuring relapse after adolescent substance abuse treatment: A proportional hazard approach. *Addictive Disorders and Their Treatment*. 2008; 7(2):87–97.
- Cornelius JR, Maisto SA, Martin CS, Bukstein OG, Salloum IM, Daley DC, Clark DB. Major depression associated with earlier alcohol relapse in treated teens with AUD. *Addictive Behaviors*. 2004; 29:1035–1038. [PubMed: 15219354]
- Dembo R, Wareham J, Poythress N, Meyers K, Cook B, Schmeidler J. Continuities in problem behavior among high risk youths. *Journal of Child & Adolescent Substance Abuse*. 2007; 16(4):91–118.
- Fergusson DM, Boden JM. Cannabis use and later life outcomes. *Addiction*. 2008; 103:969–976. [PubMed: 18482420]
- Fergusson DM, Boden JM, Horwood J. The developmental antecedents of illicit drug use: Evidence from a 25-year longitudinal study. *Drug and Alcohol Dependence*. 2008; 96:165–177. [PubMed: 18423900]
- Gardner BR, Godley MD, Funk RR, Dennis ML, Godley SH. The impact of continuing care adherence on environmental risks, substance use, and substance-related problems following adolescent residential treatment. *Journal of Addictive Behaviors*. 2007; 21(4):488–497.

- Godley MD, Godley SH, Dennis ML, Funk RR, Passetti LL. A randomized field trial of an assertive aftercare protocol for adolescents following discharge from residential substance abuse treatment: Preliminary outcomes. *Journal of Substance Abuse Treatment*. 2002; 23:21–32. [PubMed: 12127465]
- Godley MD, Kahn JH, Dennis ML, Godley SH, Funk RR. The stability and impact of environmental factors on substance use and problems after adolescent outpatient treatment for cannabis abuse or dependence. *Psychology of Addiction Behavior*. 2005; 19(1):62–70.
- Godley SH, Passetti LL, Funk RR, Gamer BR, Godley MD. Oneyear treatment patterns and change trajectories for adolescents participating in outpatient treatment for the first time. *Journal of Psychoactive Drugs*. 2008; 40(1):17–28. [PubMed: 18472662]
- Henggeler SW, Pickrel SG, Brondino MJ, Crouch JL. Eliminating (almost) treatment dropout of substance abusing or dependent delinquents through home-based multisystemic therapy. *American Journal of Psychiatry*. 1996; 153:427–428. [PubMed: 8610836]
- Hogue A, Liddle HA. Family-based treatment for adolescent substance abuse: Controlled trials and new horizons in services research. *The Journal of Family Therapy*. 2009; 31:126–154.
- Kaminer Y, Burleson JA, Goldberger R. Cognitive-behavioral coping skills and psychoeducation therapies for adolescent substance abuse. *The Journal of Nervous and Mental Disorders*. 2002; 190(11):737–745.
- Kelly JF, Brown SA, Abrantes A, Kahler CW, Myers M. Social recovery model: An 8-year investigation of adolescent 12-step group involvement following inpatient treatment. *Alcoholism: Clinical and Experimental Research*. 2008; 32(8):1468–1478.
- Kelly JF, Myers MG. Adolescents' participation in Alcoholics Anonymous and Narcotics Anonymous: Review, implications, and future directions. *Journal of Psychoactive Drugs*. 2007; 39:259–269. [PubMed: 18159779]
- Kelly JF, Myers MG, Brown SA. A multivariate process model of adolescent 12-step attendance and substance use outcome following inpatient treatment. *Psychology of Addiction Behaviors*. 2000; 14(4):376–389.
- King KM, Chung T, Maisto SA. Adolescents' thoughts about abstinence curb the return of marijuana use during and after treatment. *Journal of Consulting and Clinical Psychology*. 2009; 77(3):554–565. [PubMed: 19485595]
- Latimer WW, Newcomb M, Winters KC, Stinchfield RD. Adolescent substance abuse treatment outcome: The role of substance abuse problem severity, psychosocial and treatment factors. *Journal of Consulting and Clinical Psychology*. 2000; 68:684–696. [PubMed: 10965643]
- Maisto SA, Chung T, Cornelius JR, Martin CS. Factor structure of the SOCRATES in a clinical sample of adolescents. *Psychology of Addictive Behaviors*. 2003; 17:98–107. [PubMed: 12814273]
- Muhr, T. User's manual for ATLAS.ti 5.0 [Computer software]. ATLAS.ti Scientific Software Development GmbH; Berlin, Germany: 2004.
- Myers MG, Brown SA. The adolescent relapse coping questionnaire: Psychometric validation. *Journal of Studies on Alcohol*. 1996; 57:40–46. [PubMed: 8747500]
- Myers MG, Brown SA, Mott MA. Coping as a predictor of adolescent substance abuse treatment outcome. *Journal of Substance Abuse*. 1993; 5:15–29. [PubMed: 8329878]
- Powers RA. Alcohol and drug abuse prevention. *Psychiatric Annals*. 2007; 37(5):349–358.
- Ramo DE, Brown SA. Classes of substance abuse relapse situations: A comparison of adolescents and adults. *Psychology of Addictive Behaviors*. 2008; 22(3):372–379. [PubMed: 18778130]
- Richter SS, Brown SA, Mott MA. The impact of social support and self-esteem on adolescent substance abuse treatment outcome. *Journal of Substance Abuse*. 1991; 3:371–385. [PubMed: 1668229]
- Segal BM, Stewart JC. Substance use and abuse in adolescence: An overview. *Child Psychiatry and Human Development*. 1996; 26(4):193–210. [PubMed: 8935310]
- Shoemaker RH, Sherry P. Post-treatment factors influencing outcome of adolescent chemical dependency treatment. *Journal of Adolescent Chemical Dependency*. 1991; 2:89–106.

- Sterling S, Chi F, Campbell C, Weisner C. Three-year chemical dependency and mental health treatment outcomes among adolescents: The role of continuing care. *Alcoholism: Clinical and Experimental Research*. 2009; 33(8):1417–1429.
- Sussman S, Skara S, Ames SL. Substance abuse among adolescents. *Substance Use and Misuse*. 2008; 43:1802–1828. [PubMed: 19016166]
- Teplin LA, Abram KM, McClelland GM, Washburn JJ, Pikus AK. Detecting mental disorder in juvenile detainees: Who receives services? *American Journal of Public Health*. 2005; 95(10): 1773–1880. [PubMed: 16186454]
- Tomlinson KL, Brown SA, Abrantes A. Psychiatric comorbidity and substance use treatment outcomes of adolescents. *Psychological Addictive Behaviors*. 2004; 18:160–169.
- Wagner EF. Developmentally informed research on the effectiveness of clinical trials: A primer for assessing how developmental issues may influence treatment response among adolescents with alcohol use problems. *Pediatrics*. 2008; 121:S337–S347. [PubMed: 18381497]
- Waldron HB, Turner CW. Evidence-based psychosocial treatments for adolescent substance abuse. *Journal of Clinical Child & Adolescent Psychology*. 2008; 37(1):238–261. [PubMed: 18444060]
- Williams RJ, Chang SY, Addiction Centre Adolescent Research Group Foothills Medical Centre. A comprehensive and comparative review of adolescent substance abuse treatment outcome. *Clinical Psychology: Science and Practice*. 2000; 7(2):138–166.
- Winters KC. Treating adolescents with substance use disorders: An overview of practice issues and treatment outcome. *Substance Abuse*. 1999; 20:203–225. [PubMed: 12511829]
- Winters KC, Stinchfield R, Latimer WW, Lee S. Long-term outcome of substance-dependent youth following 12-step treatment. *Journal of Substance Abuse Treatment*. 2007; 33:61–69. [PubMed: 17588490]
- Yu JW, Buka SL, Fitzmaurice GM, McCormick MC. Treatment outcomes for substance abuse among adolescents with learning disorders. *The Journal of Behavioral Health Services & Research*. 2006; 33(3):275–286. [PubMed: 16752106]

TABLE 1

What Adolescents Need When Leaving Treatment

	<u>Adolescents (N = 28)</u>		<u>Parents (N = 30)</u>		<u>Staff (N = 29)</u>		<u>Total (N = 87)</u>	
	N	%	N	%	N	%	N	%
<i>Aftercare-Related Needs</i>								
Outpatient Treatment *	6	21.43%	9	30.00%	19	65.52%	34	39.08%
AA/NA or Sponsor	8	28.57%	4	13.33%	4	13.79%	16	18.39%
<i>Relationships with Peers & Family</i>								
Support	7	25.00%	9	30.00%	10	34.48%	26	29.89%
Positive Peers	7	25.00%	5	16.67%	2	6.90%	14	16.09%
Family Integration	3	10.71%	1	3.33%	0	0.00%	4	4.60%
Someone to Talk to	3	10.71%	0	0.00%	4	13.79%	7	8.05%
<i>Non-Drug-Related Environments & Activities</i>								
In School or Working	8	28.57%	8	26.67%	4	13.79%	20	22.99%
Hobbies/Structured Time	4	14.29%	6	20.00%	2	6.90%	12	13.79%
New/Healthy Environments	2	7.14%	4	13.33%	1	3.45%	7	8.05%
Religion	1	3.57%	1	3.33%	0	0.00%	2	2.30%
<i>Internal Processes</i>								
Focus	2	7.14%	2	6.67%	1	3.45%	5	5.75%
Emotional Stability	0	0.00%	2	6.67%	0	0.00%	2	2.30%
Commitment to Program	2	7.14%	0	0.00%	0	0.00%	2	2.30%
Discipline	1	3.57%	0	0.00%	0	0.00%	1	1.15%
Integrity	1	3.57%	0	0.00%	0	0.00%	1	1.15%
<i>Other</i>								
Parent Rules	1	3.57%	0	0.00%	3	10.34%	4	4.60%
Information	0	0.00%	0	0.00%	2	6.90%	2	2.30%
Nothing	1	3.57%	2	6.67%	0	0.00%	3	3.45%
TOTAL	57	35.19%	53	32.72%	52	32.10%	162	100.00%

*
 $p < .01$.