



Published in final edited form as:

J Psychoactive Drugs. 2013 ; 45(4): 297–303.

Perceptions about Recovery Needs and Drug-Avoidance Recovery Behaviors among Youth in Substance Abuse Treatment

Rachel Gonzales, Ph.D., M.P.H.^{a,b}, M. Douglas Anglin, Ph.D.^a, Deborah C. Glik, Sc.D.^a, and Christina Zavalza, B.A.^b

^aIntegrated Substance Abuse Programs, University of California, Los Angeles, CA

^bPsychology Department, Azusa Pacific University, Azusa, CA

^cSchool of Public Health, University of California, Los Angeles, CA

Abstract

Objective—This study used mixed methods to explore youth attitudes about recovery-related needs and important drug-avoidance behaviors after treatment.

Method—Focus groups were conducted with 118 substance using youth in treatment (four residential and 10 outpatient settings) throughout Los Angeles County.

Results—The average age was 17.4 ($SD = 2.9$); 78.3% were male, 66.1% Latino; and most were in treatment for primary marijuana (40.9%) or methamphetamine (30.4%) abuse. Quantitative results from the drug-avoidance activity survey identified the following factors youth rated as important to their recovery after treatment: lifestyle improvement activities (95.7%); changing personal drug behaviors (89.6%); drug environment/culture change activities (82.5%); with the least important being therapeutic activities (78.5%). Qualitative findings from focus groups that asked what youth think are important for recovery programs to address after treatment revealed the following four areas: (1) recovery promotion to developmentally appropriate activities (95%); (2) facilitating the use of coping skills to deal with stress (85%); (3) offering alternative recovery support options (not just abstinence only) (75%); and (4) continuing to provide substance use education (65%).

Conclusion—Findings highlight essential aspects of recovery in terms of need and drug-avoidance behaviors considered important to youth in treatment. Such information will help to better address clinical and recovery support models aimed at relapse prevention to ensure that the perceived problems of substance-abusing youth are adequately met.

Keywords

drug-avoidance activities; recovery needs; youth substance abuse

Copyright © Taylor & Francis Group, LLC

Please address correspondence to Rachel Gonzales, Azusa Pacific University, 901 E. Alosta Avenue, P.O. Box 7000, Azusa, CA 91702, or UCLA ISAP, 1640 S. Sepulveda Blvd, Suite 320, Los Angeles, CA 90025; phone: 626-815-6000 x2744; fax: 626-812-3072; rachelmg@ucla.edu.

Please note that the authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

INTRODUCTION

Substance use is highly prevalent among young people under 24 in the United States. Recent data from the 2010 National Survey on Drug Use and Health reveal that past-year illicit drug dependence and abuse was estimated at 7.3% among 12- to 17-year-olds, rising to 20% for 18-to 24-year-olds (SAMHSA 2011a). These trends are concerning given that substance use disorders commonly start during youth (Dennis et al. 2005), and the majority of adults with substance use disorders started using before the age of 15 (Brown et al. 2001).

Although an increasing number of empirically grounded behavioral treatments are available to treat substance use disorders among youth (Winters, Botzet & Fahnhorst 2001), post-treatment relapse remains a major concern (Dennis et al. 2004; Cornelius et al. 2003). Relapse rates average 60% during the initial three months post-treatment (Williams & Chang 2000), and increase to about 80% at one-year follow-up (Godley et al. 2004). To counteract vulnerability to relapse, aftercare for youth is a priority issue.

Research has found poor compliance and limited engagement with aftercare among young people with substance use disorders, with less than 10% participating (Godley et al. 2007). This is concerning since research has established that a significant predictor of positive treatment outcomes at one-year follow-up is aftercare participation (Ramos & Brown 2008). Given that young people typically return to high-risk environments that impede recovery after treatment (Ramirez et al. 2002), and the complexities associated with youth aftercare engagement (Godley et al. 2007), more work is needed to understand youth recovery needs and services (Godley & White 2006). Considerable attention has been given to the recovery process in terms of identifying optimal methods to address substance use disorders among young people (Kaminer & Godley 2010).

To date, there has been divergent theoretical and clinical thinking on recovery from drug abuse. Common characterizations include: “a process of change through which an individual achieves abstinence and improved health, wellness, and quality of life” (CSAT 2007), “a voluntarily maintained lifestyle comprised of sobriety, personal health, and citizenship” (Betty Ford Institute 2007), or “a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential” (SAMHSA 2011b). Despite such expert attention on what recovery constitutes, a more in-depth examination of recovery from those affected is needed.

This purpose of this study was to explore youth attitudes about recovery-related needs and important drug-avoidance behaviors after treatment using a mixed methods approach. Specifically, youth were asked to: (1) rate various behaviors that they consider to be important for achieving and maintaining a successful recovery after treatment using a survey; and (2) offer suggestions, via focus groups, for what recovery programs should be addressing with youth after treatment (to help them avoid drugs/relapse) via focus groups. The combination of quantitative and qualitative methodologies in substance abuse treatment research has been encouraged (Battjes, Onken & Delany 1999) to better understand understudied areas, like youth recovery (SAMHSA 2011a; Dennis et al. 2005).

METHOD

Procedure

A purposive sample of 118 youth between 12 and 24 years old enrolled in outpatient (n = 10) and residential (n = 4) substance abuse treatment programs throughout Los Angeles County, California, participated in a 90-minute focus group between September and December 2010. A total of 14 focus groups were conducted and were moderated by the lead author with assistance from a research assistant. All focus groups were audio-recorded and transcribed for coding-theme generation (Krueger 1998). The research protocol was approved and monitored by the University of California Los Angeles Institutional Review Board. Upon completion of the groups, youth were compensated with a \$10 gift card for their time.

Sample

The mean age of the 118 youth participants was 17.4 years ($SD = 2.9$, range: 12–24 years); 78.3% were male, 66.1% Latino, with fewer African American (3.5%), Asian (1.7%), and Native American (1.7%). Marijuana (40.9%) and methamphetamines (30.4%) were primary substances most participants were in treatment for, followed by heroin (7.8%) and prescription opiates (6.1%), alcohol (6.1%), ecstasy (4.3%), cocaine (2.6%), and poly-drug use (1.7%). Most participants were treatment first-timers (67.8%) and enrolled in outpatient (69.5%) programs.

Measures

Participants completed a survey that assessed opinions about drug-avoidance recovery behaviors using an adapted version of the 16-item adult Drug Avoidance Activity (DAA) survey that has been used with adults (Silverman et al. 1996; Farabee, Rawson & McCann 2002). Survey items represent recovery activities promoted during treatment to achieve successful recovery outcomes. For example, participants were asked “to what extent do you think the following activities [avoiding places where drugs are available, scheduling time, spending time with people who do not use drugs, etc.] are important for helping young people avoid drugs (i.e., not relapse) after treatment?” Respondents rated the items using a 4-point scale: (1) very important; (2) somewhat important; (3) neutral; (4) not important at all. The qualitative focus group discussion included questions covering broad concepts about addiction chronicity, recovery, and relapse. The recovery question used in this study is based on “recovery need”: “*In your opinion/experience, list the most important things recovery programs should be addressing after a young person finishes treatment to support their recovery?*” Additionally, prior to participating in the focus groups, participants anonymously completed a brief demographic questionnaire.

Data Analysis

Reliability testing of the DAA survey was conducted to determine the internal consistency (Cronbach’s alpha = 0.84). Exploratory factor analysis was performed of DAA items to identify conceptual factors. Quantitative analyses were done with the Statistical Program for Social Sciences (SPSS) v20.

Focus groups were transcribed verbatim by a team of study Research Assistants (RA) using ATLAS.ti, a qualitative data software program. Line-by-line data scrutiny of the transcribed data was conducted by RAs and the study investigator to identify coding schemes. Divergent coding was resolved by internal reconciliation. With acceptable inter-rater reliability of codes, a codebook was developed. Consensual qualitative research (CQR) (Hill, Thompson & Williams 1997) was used to group the coded data into conceptual themes. Specifically, the study team individually assigned frequency counts to the responses by select codes and then identified emergent themes using a majority response pattern or ranking scheme of the code frequencies (Hwang 2008). Themes were refined and finalized when unanimous agreement by the study team was reached. This is a complex, iterative process that leads to a thematic understanding of the participants' recovery experiences. Additionally, unique qualitative statements from participants within the transcripts were selected to represent core ideas associated with each of the identified themes.

RESULTS

Youth Perceptions about Drug-Avoidance Recovery Behaviors

Using a second-order factor analysis, the 16 items from the DAA survey loaded into four factors of recovery behaviors, including: (1) lifestyle improvement; (2) drug environment/culture change; (3) changing personal drug behaviors; and (4) therapeutic activities (see Table 1). Principal component analysis showed that roughly 56.5% of the variance was explained in the total correlation matrix. The four factor loadings accounted for 30.6%, 11.1%, 8.3%, and 6.6% of the variance in the matrix respectively, with eigenvalues greater than one. Correlations of the items ranged from a low of .262 to a high of .715 across the scales.

Using these four scales, survey results indicate that 95.7% of the respondents rated lifestyle improvement to be the most important aspect of recovery. This factor included the following five related DAA behavioral items: finding a job or vocation, getting back to school, getting involved in extracurricular activities/hobbies, spending time with family, and going to church. The second highly ranked recovery DAA factor (89.6%) had to do with "changing personal drug behavior." This factor consisted of four items related to scheduling time, getting rid of drug paraphernalia, stopping the use of other substances, and limiting access to money. Approximately 82.5% of the sample rated "changing drug culture/environment" as an important DAA factor for recovery. This factor included three DAA behavioral items: spending time with peers who do not use, avoiding peers who use drugs, and avoiding places where drugs are. The lowest rated recovery DAA factor was therapeutic activities (78.5%), which comprised the following four DAA behavioral items: going to 12-step meetings, being active in aftercare, using treatment learned skills, and calling a counselor.

Qualitative Youth Perceptions about Recovery Needs

Four domains emerged from qualitative responses given to the question "*In your opinion/experience, list the most important things recovery programs should be addressing after a young person finishes treatment to help them with their recovery,*" including: (1) recovery promotion to developmentally engaging activities (95%); (2) facilitating the use of coping

skills to deal with stress (85%); (3) offering alternative recovery support options (not just abstinence only) (75%); and (4) continuing to deliver substance-use education (65%). Described below are emergent themes illustrated with quotes edited for cleaner sentence structure (i.e., awkward terms of “umm” and “ugh” were removed).

Theme 1—*Recovery promotion to developmentally engaging activities* was the dominant theme identified by youth as an important factor for recovery support programs to address.

“Programs should help us get involved in other things around our community like community centers in our area ... where we live” because “we want to be able to be and feel normal again, like an everyday young person who just got caught up in a bad time” and “to like forget about drugs, I’ll forget about drugs when I’m kept busy.”

“So like offer up places to go in the community, like park centers, gyms, YMCA, street fairs, recreation, bowling, skate parks, libraries, camps ... or even church ... a lot of people say that it’s worked for them ... these ladies come in here about once/week to talk about spirituality and it seems from them that church helps with the urge to use ... like it has just lifted off of some of them.”

“Making some new friends or sober friends is just difficult so I think giving us skills or redirecting us to activities that are healthy can work better. So like, tell us about social networking websites ... sort of like match.com for sobriety or go check in with someone online ... just to have a profile to get information and meet other sober young people and maybe date, like a J-date but only A-date or something.”

“Because a lot of people here [in treatment] leave early because they don’t connect with the people or place ... so programs should encourage us to do something besides getting high –like tell us where jobs are at [opportunities], give us help with resumes, offer school classes to take or support groups for anger or stress.”

“Programs should remind us about things to do around our community, like ... exercise, cook, go to the library, volunteer, art, music, dance, play pool/darts/dominos/cards or video games, go to the movies, use the internet computers for learning or social media, go skating/boarding, learn art, drawing, or something that’s interesting.”

Theme 2—*Facilitating the use of coping skills to deal with stress* was the second most important theme youth identified as essential for recovery support programs to address.

“Programs should continue to give us a safe environment to work on our recovery even after our treatment is done ... but talk about how to deal with life stress, like personal life or relationships or future things ... this can be very important to help us understand that life is more than just not using [drugs].”

“Most of us [young people] here [in treatment] use drugs because of anger, emotions, or feelings, so it is important that these things are constantly watched out for.”

“I found myself getting deeper and deeper into meth when I was trying to deal with work, school work building up for me and like having to finish huge amounts of work, you know finals week or whatever, so have to like be able to stay up or work long hours nonstop ... that’s pretty much how meth helped me out with that.”

“Most youth today are stressed out for all kinds of reasons, like parents, school, relationships, breakups, sex, friendships gone bad, legal matters, not having money or having financial debt and the list goes on.”

“The reason why I used drugs was that I wanted to feel confident, my confidence is completely off ... you know cuz the reason why I use drugs was to feel confident in social, uncomfortable situations ... so helping us deal with social stressors to help us build up our confidence.”

Theme 3—Offering alternative recovery support options (not just abstinence only) was the third theme they raised as important for programs to address after treatment. Supportive statements by youth include:

“We are not ready to surrender our lives to living completely abstinent like the 12-step model says and saying no to alcohol or drugs forever.”

“It’s not that there’s nothing to do in AA/NA meetings ... it’s that there is nothing fun or engaging for us to want to do in there ... many of us just don’t vibe with the people in the meetings whose lives revolve around complete abstinence and the steps ... so we need to be shown that there are alternative places to go.”

“Because AA is set up to revolve around how to remain sober and stay on the recovery bus for the rest of your life ... meaning design our entire lives around going to meetings daily, getting a sponsor and fellowshipping on an ongoing basis ... which is not how society operates.”

“Why can’t treatment teach us how to live in moderation and keep us accountable to not completely give our lives away to using daily ... so they should stop pushing us into feeling guilty if we do not pick the total abstinence path.”

“In our mind, it’s hard to imagine life, the rest of your life, without a glass of champagne, a beer, a blunt because we were young ... drinking was before any of our existence and is still heavily present in our day ... so I don’t get why we can’t still drink in moderation ... like I wish there was a place that I could go to that had that moderate understanding to be in recovery.”

Theme 4—*Continuing to deliver substance use education* was the fourth theme identified by youth in terms of what recovery support programs need to address.

“Encouraging us to get enrolled in drug class, like after I get out, cuz I still need it, even though we’re clean right now ... and many of us don’t think we are junkies or have a long-term dependence, like we can stop at any time.”

“Because education can help someone decide for themselves ... and with no education they follow others ... followers of the high.”

“I think we need constant education so we can do consequential thinking like they show us in here [treatment] ... not just a one-time message because we’re young, we forget, we don’t listen the first time we hear it, so we need to keep hearing it so we get it someday.”

“Information that will make us take a double take to really think about the aftermath ... like not how drugs kill your brain ... but different information on how it destroys different parts of the brain that are in charge of sex, feelings, intelligence ... you know the things we worry about.”

“Even though a lot of us are going to ignore the facts ... they still care deep down ... it’s all mental ... so knowledge is power ... hopefully one day it will make a difference ... before it’s not too late.”

DISCUSSION

Substance use among youth under 24 represents a priority health issue (CDCP 2009) that greatly impacts public health, social service, educational, and legal systems (CASA Columbia 2001). Roughly 74% of mortality among youth 10–24 is attributed to high-risk behaviors, including automobile injuries due to preventable accidents, homicide, and suicide, all of which are associated with illicit drug and alcohol misuse (CDCP 2009). In light of this, understanding substance-abusing youth perceptions about important drug-avoidance behaviors and essential recovery needs, as done by this study, offers insight for the treatment community working to address these larger substance use issues.

The types of drug-avoidance recovery behaviors that youth ranked as important for achieving a successful recovery after treatment included “lifestyle improvement activities” within the areas of employment/careers, school, extracurricular activities/hobbies, family, and church. These findings fit well with SAMHSA’s (2011b) current definition of recovery, which is considered to be “a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.” When examining youth recovery, it is also important to consider youth developmental trajectories, given that during the early and middle developmental years, youth experience major biological, cognitive, social, and emotional changes that influence self-identity formation, which can be greatly affected by drug use patterns (Achenbach, McConaughy, & Howell 1987). For instance, substance abuse during the developmental years can negatively affect various aspects of self-identity, which affects the progression and maintenance of such problem behaviors over time (Bishop et al. 2005; Jones et al. 1989).

Given that the majority of the youth in this study were Latino suggests that it is important to examine cultural-specific developmental frameworks to better understand potential differences in the way ethnically diverse youth view recovery (e.g., Borden et al. 2006). Future research should continue to investigate potential cultural differences linked to the social and emotional developmental effects of substance abuse patterns among ethnically diverse youth to be able to better inform culturally sensitive recovery models (Amodeo & Collins 2007). For example, studies around self-identity formation with ethnically diverse youth have found that youth who hold positive “ethnic identity” perceptions tend to be

protected against detrimental outcomes, such as fatalistic attitudes around disease progression (Arbona et al. 1999; Belgrave, Marin & Chambers 2000). Although there is complexity in the developmental pathways that lead youth to engage in drug use behaviors, it is an important area to study given that it is during this developmental period that the risk is greatest for the onset of later drug problems (dependence/addiction) (Dennis et al. 2005).

Two other drug-avoidance areas that youth rated as very important for having a successful recovery had to do with changing personal drug behaviors and changing drug environment/culture. We know that, for young people, relapse is influenced by a social context or an environment that can facilitate or impede recovery (Ramirez et al. 2002); hence promoting change in terms of “spending time with non-drug using peers, getting rid of drug paraphernalia and stopping the use of other substances, scheduling time, and limiting access to money” holds promise to reinforce abstinence. Youth rated “therapeutic drug avoidance activities” such as going to 12-step meetings, being active in aftercare, using treatment-learned skills, or calling a counselor the lowest in terms of recovery importance. These findings are contrary to Farabee (2002), who identified “using therapeutic strategies, such as cognitive-behavioral thought-stopping techniques” and “avoiding places where drugs are available” as important recovery activities associated with positive outcomes among drug-dependent adults. These results coincide with themes identified from qualitative focus groups with youth, including promoting recovery activities that are developmentally engaging. Such results highlight the need to question the utility of traditional-based recovery approaches for youth and consider alternative approaches that are developmentally more appropriate. Specifically, when promoting recovery-support activities for youth, there needs to be a shift away from disease or pathology-focused models (i.e., therapeutic processes) towards wellness-oriented practices (i.e., lifestyle improvement and personal behavior change).

Although our findings contribute to the sparse research literature on youth recovery, limitations need to be considered. First, the sample comprised youth in treatment; hence findings may not be generalizable to non-treatment-involved youth. Second, given that the data was collected in the context of a focus group that assured anonymity, personal data collected (i.e., socio-demographic information) could not be linked to individual focus group responses; hence analyses were limited to descriptive features. Despite the growing research body on youth recovery, we still know very little about the essential elements that lead to recovery success among youth transitioning out of treatment. The recovery field is challenged by the diverse nature of substance-abusing youth in terms of developmental, behavioral, social, and cultural factors; hence future research is needed to further examine recovery behaviors among youth within the context of personal, cultural, and social characteristics. In addition, more information is needed on how and why youth make decisions about their personal recovery and continuing care options. Future studies should provide more in-depth analysis of structural-related factors that are associated with youth recovery behaviors, such as access and availability to recovery support programs.

CONCLUSIONS

Exploring perceptions among youth in treatment about elements of recovery is essential to substance abuse providers to help them plan effective strategies and programs around recovery support. Developmentally appropriate recovery-support services are needed to counteract the relapse risk youth face as they transition out of treatment and return to high-risk internal (mental) and external (social) environments (Ramos & Brown 2008). Although 12-step facilitation, like AA/NA, has been regarded as the perfect aftercare, few young people participate (Kelly, Myers & Brown 2005), as they do not developmentally relate to the focus of such programs (i.e., disease notions of substance use, lack of behavioral control to stop, and life-long recovery process) (Sussman 2010; Gonzales et al. 2012). In fact, research shows that very few young people participate in or attend 12-step meetings (Alcoholics Anonymous 2007). Based on our findings, youth in treatment are in need of alternative environments or settings besides traditional programs, like 12-step, that embrace total abstinence.

This study may offer knowledge to the treatment community concerning practical questions related to “what do youth consider to be important elements of recovery behaviors to avoid drugs,” as well as “what do programs need to address after treatment to support recovery.” For instance, findings highlight the need for recovery-support programs to promote the use of coping skills for stress management and improve self-identities as well as continue to deliver education about the harmful consequences of drug abuse. Overall, understanding and identifying elements of recovery-support programs that can optimally address recovery as perceived by youth is an essential step for improving recovery models for youth populations.

Acknowledgments

This study was supported by grant number K01 DA027754 from the National Institute on Drug Abuse (NIDA). The authors would like to acknowledge the Center for Advancing Longitudinal Drug Abuse Research (CALDAR), directed by Dr. Yih-Ing Hser and others, for their ideas and feedback on concepts of recovery. Additionally, the authors thank the administrative and treatment staff at the participating treatment programs for their support and they also thank Alison Moffitt for contributing to the editing and proof-reading of the article as well as assistance with references.

References

- Achenbach T, McConaughy SH, Howell CT. Child/adolescent behavioral and emotional problems: Implications of cross-informant correlation for situational specificity. *Psychological Bulletin*. 1987; 101:213–232. [PubMed: 3562706]
- Alcoholics Anonymous. *Young People and AA*. New York: AA World Services; 2007.
- Amodeo M, Collins ME. Applying positive youth development principles in practice with youth with problem behaviors. *Families in Society: The Journal of Contemporary Human Services*. 2007; 88 (1):75–85.
- Arbona C, Jackson RH, McCoy A, Blakely C. Ethnic identity as a predictor of attitudes of adolescents toward fighting. *Journal of Early Adolescence*. 1999; 19:323–340.
- Battjes RJ, Onken LS, Delany PJ. Drug abuse treatment entry and engagement: Report of a meeting on treatment readiness. *Journal of Clinical Psychology*. 1999; 55:643–57. [PubMed: 10392794]
- Belgrave FZ, Marin BVO, Chambers DB. Cultural, contextual, and intrapersonal predictors of risky sexual attitudes among urban African American girls in early adolescence. *Cultural Diversity and Ethnic Minority Psychology*. 2000; 6:309–322. [PubMed: 10938638]

- Bishop DI, Weisgram ES, Holleque KM, Lund KE, Wheeler-Anderson JR. Identity development and alcohol consumption: Current and retrospective self-reports by college students. *Journal of Adolescence*. 2005; 28:523–533. [PubMed: 16022886]
- Borden LM, Perkins FA, Carleton-Hug A, Stone M, Keith JG. Challenges and opportunities to Latino youth development: Increasing meaningful participation in youth development programs. *Hispanic Journal of Behavioral Sciences*. 2006; 28:187–208.
- Brown SA, D'Amico EJ, McCarthy DM, Tapert SF. Four-year outcomes from adolescent alcohol and drug treatment. *Journal of Studies on Alcohol*. 2001; 62 (3):381–2. [PubMed: 11414348]
- Center for Substance Abuse Treatment. National Summit on Recovery: Conference Report. Rockville, MD: Substance Abuse and Mental Health Services; 2007. DHHS Publication No. (SMA) 07–4276
- Centers for Disease Control and Prevention. [Accessed March 10, 2011] Youth Risk Behavior Survey. 2009. Available at: <http://www.cdc.gov/yrbss>
- Cornelius JR, Maisto SS, Pollock NK, Martin CS, Salloum JM, Lynch KG, Clark DB. Rapid relapse generally follows treatment for substance use disorders among adolescents. *Addictive Behaviors*. 2003; 28 (2):381–6. [PubMed: 12573689]
- County of Los Angeles, Department of Public Health, Substance Abuse Prevention and Control. Annual Los Angeles County Participant Reporting System Data 2007–2008 Fiscal Year. Los Angeles: Department of Public Health, Substance Abuse Prevention and Control; 2008.
- Dennis ML, Goodley SH, Diamond G, Tims FM, Babor T, Donaldson J, Liddle H, Titus JC, Kaminer Y, Webb C, Hamilton N, Funk R. The cannabis youth treatment (CYT) study: Main findings from two randomized trials. *Journal of Substance Abuse Treatment*. 2004; 27 (3):197–213. [PubMed: 15501373]
- Dennis ML, Scott CK, Funk R, Foss MA. The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment*. 2005; 28 (Supplement 1):S51–62. [PubMed: 15797639]
- Farabee D, Rawson R, McCann M. Adoption of drug avoidance activities among patient sub-contingency management and cognitive-behavioral treatments. *Journal of Substance Abuse Treatment*. 2002; 23 (4):343–50. [PubMed: 12495796]
- Godley MD, Godley SH, Dennis ML, Funk RR, Passetti LL. The effect of assertive continuing care on continuing care linkage, adherence and abstinence following residential treatment for adolescents with substance use disorders. *Addiction*. 2007; 102:81–93. [PubMed: 17207126]
- Godley, MD.; White, WL. A brief history and some current dimensions of adolescent treatment in the United States. In: Galanter, M., editor. *Alcohol Problems in Adolescents and Young Adults: Epidemiology, Neurobiology, Prevention, and Treatment*. New York: Springer Science & Business Media; 2006.
- Godley SH, Dennis ML, Godley MD, Funk RM. Thirty-month relapse trajectory cluster groups among adolescents discharged from outpatient treatment. *Addiction*. 2004; 99 (Supplement 2):129–39. [PubMed: 15488111]
- Gonzales R, Anglin DA, Beattie R, Ong CA, Glik DC. Perceptions of chronicity and recovery among youth in treatment for substance use problems. *Journal of Adolescent Health*. 2012; 51 (2):144–9. [PubMed: 22824444]
- Hill CE, Thompson BJ, Williams EN. A guide to conducting consensual qualitative research. *Journal of Counseling Psychology*. 1997; 25:517–72.
- Hwang S. Utilizing qualitative data analysis software: A review of Atlas.ti. *Social Science Computer Review*. 2008; 26 (4):519–27.
- Jones RM, Hartmann BR, Grochowski CO, Glider P. Ego identity and substance abuse: A comparison of adolescents in residential treatment with adolescents in school. *Personality and Individual Differences*. 1989; 10:625–631.
- Kaminer Y, Burlinson JA, Burke RH. Efficacy of outpatient aftercare for adolescents with alcohol use disorders: A randomized controlled study. *Journal of the American Academy of Child and Adolescent Psychiatry*. 47(12):1405–12. [PubMed: 18978635]
- Kaminer Y, Godley M. From assessment reactivity to after-care for adolescent substance abuse: Are we there yet? *Child and Adolescent Psychiatric Clinics of North America*. 2010; 19:577–90. [PubMed: 20682222]

- Kelly JF, Myers MG, Brown SA. The effects of age composition of 12-step groups and adolescent participation and substance use outcome. *Journal of Child and Adolescent Substance Abuse*. 2005; 15 (1):63–72. [PubMed: 18080000]
- Kruger, RA. *Moderating Focus Groups*. Thousand Oaks, CA: Sage; 1998.
- Ramirez R, Hinman A, Sterling S, Weisner C, Campbell C. Peer influences on adolescent alcohol and other drug use outcomes. *Journal of Nursing Scholarship*. 44(1):36–44. [PubMed: 22339982]
- Ramos DE, Brown SA. Classes of substance abuse relapse situations: A comparison of adolescents and adults. *Psychology of Addictive Behaviors*. 22:372–9.
- Silverman K, Higgins ST, Brooner RK, Montoya ID, Cone EJ, Schuster CR, Preston KL. Sustained cocaine abstinence in methadone maintenance patients through voucher-based reinforcement therapy. *Archives of General Psychiatry*. 1996; 53 (5):409–15. [PubMed: 8624184]
- Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-4. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2011a. HHS Publication No. (SMA), 11–4658
- Substance Abuse and Mental Health Services Administration (SAMHSA). Working definition of recovery. 2011b. Available at: <http://www.samhsa.gov/newsroom/advisories/1112223420.aspx>
- Sussman S. A review of Alcoholics Anonymous/Narcotics Anonymous programs for teens. *Evaluation and the Health Professions*. 2010; 33(1):26–55. [PubMed: 20164105]
- The Betty Ford Institute Consensus Panel. What is recovery? A working definition from the Betty Ford Institute. *Journal of Substance Abuse Treatment*. 2007; 33:221–228. [PubMed: 17889294]
- The National Center on Addiction and Substance Abuse at Columbia University. The formative years: Pathways to substance abuse among girls and young women ages. 2003. p. 8-22. Available at: http://www.casacolumbia.org/articlefiles/380-formative_years_pathways_to_substance_abuse.pdf
- Williams R, Chang S. A comprehensive and comparative review of adolescent substance abuse treatment outcome. *Clinical Psychology: Science and Practice*. 2000; 7:138–66.
- Winters KC, Botzet AM, Fahnhorst T. Advances in adolescent substance abuse treatment. *Current Psychiatry Reports*. 2001; 13(5):416–21. [PubMed: 21701838]

TABLE 1

Drug Avoidance Activity (DAA) Factors and Items

Factors	Items	Measures
Lifestyle Improvement	5	Focusing on a job or vocation; Getting back into school; Getting involved in things/ extracurricular activities/hobbies; Spending time with family; Going to church
Changing Personal Behavior	4	Scheduling time; Getting rid of drug paraphernalia; Stopping the use of other substances; Limiting access to money
Changing Drug Culture/Environment	3	Avoiding places where drugs are; Avoiding peers who use drugs; Spending time with peers who do not use drugs
Therapeutic-Focus	4	Going to 12-step meetings; Being active in aftercare; Using treatment-learned skills; Calling a counselor

Chronbach Alpha = .84.