Addiction Research and Theory
October 2009; 17(5): 453–468

informa
healthcare

Urban adolescents' reflections on brief substance use treatment, social networks, and self-narratives

MICHAEL J. MASON, KRISTA MALOTT, & TACIA KNOPER

Department of Education & Human Services, Villanova University, Villanova, PA, USA

(*Received 20 October 2007; revised 28 January 2008; accepted 18 March 2008*)

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

Abstract
The purpose of this study was to examine urban adolescents' experiences of completing a brief, substance use treatment protocol. Semi-structured interviews were conducted in 2006 with 23 patients to better understand their treatment experience, the subsequent impact on their social networks and self-narrative reflections. Results suggest common themes of new awareness of self in relation to substance use, utility of social networks in providing ongoing support, and hopeful future self-narratives. Participants named and evaluated all the substances that they could think of, with marijuana most frequently named and rated as good (65% of patients), indicating a positive attitude toward this drug. In general, we conclude that these qualitative data provide evidence of the effectiveness of brief substance abuse treatment for urban adolescents.

Keywords: *Urban adolescents, brief substance use treatment, social networks, self-narrative, qualitative analysis, integration*

Introduction

Recent research provides broad consensus for the negative consequences of underage substance use including a range of physical, academic, and social problems (NIAAA 2000; Steinman and Schulenberg 2003; Donovan 2004; Johnston et al. 2007). Annual surveys conducted in the US have shown that while overall adolescent substance use has slightly decreased in the last few years, binge drinking among 15–16-year olds has recently increased, with over 20% of this age group reporting having five or more drinks in a row within the last two weeks. For 12th graders, ecstasy and prescription medication misuse

Correspondence: Michael J. Mason, Department of Education & Human Services, Villanova University, Villanova, 19085-1699, PA, USA. E-mail: michael.mason@villanova.edu

ISSN 1606-6359 print/ISSN 1476-7392 online © 2009 Informa UK Ltd.
DOI: 10.1080/16066350802068847

Copyright Informa Healthcare 2009
Not for Sale or Commercial Distribution
Unauthorized use prohibited.
Authorized users can download,
display, view and print a single
copy for personal use.
RIGHTSLINK

continues to increase, while inhalant use has increased among 8th graders over recent years (Johnston et al. 2007). Due to persistent substance use by youth, the need continues to grow for effective and efficient adolescent treatment. In 2005, there were 2.1 million youths in the US aged 12–17 (8.3% of this population) who needed treatment for an illicit drug or alcohol use problem. Of this group, only 181,000 youth received treatment at a specialty facility (8.6%), leaving over 1.9 million youth with a continued need for treatment (Office of Applied Studies 2005). It is with these data as a backdrop that a multi-dimensional approach towards understanding and addressing adolescent substance involvement is proposed to address this serious public health issue in new and deeper ways. Through the systematic examination of the reflections of adolescents' involvement with a model substance abuse treatment program, their interpretations of their social worlds, and their understanding of their self-narrative, it is theorized that a fuller picture will emerge of adolescent substance abuse treatment that will be informative to larger, experimental studies of adolescent addiction.

Adolescent substance use treatment

A promising development to address the unmet need of adolescent substance use is the growing body of evidence-based treatments that have emerged in the last 10 years (Winters 1999; Dennis et al. 2000; Williams et al. 2000). These treatments have recently been studied in national trials, yielding important results for patients, practitioners, and researchers. Unfortunately, dissemination of the findings from these highly controlled efficacy trials has been slow to reach community settings where these treatments could benefit many low-resource and underserved adolescents. Further, there is relatively little qualitative research on the experiences of adolescents receiving standardized treatments that may provide insights into the most effective portion of the treatment protocols, or the "active ingredients" that could help in culturally adapting these treatments to diverse populations.

Urban youth risks

Research has shown that urban youth are particularly vulnerable to early use and future dependency on illicit drugs and alcohol (Wright 2004). Individuals who live in metropolitan areas, regardless of race or gender, are more likely than those in non-metropolitan areas to have used an illicit drug as well as alcohol during the past year (Wright 2004; Office of Applied Studies 2005). African–American youth have consistently reported less alcohol use than their non-Hispanic White counterparts. However, rates of heavy and problem drinking among African–American adults, especially males, are higher than for non-Hispanic Whites (Caetano and Clark 1998). Studies also show that for any given level of alcohol consumption, ethnic minority populations experience more negative health and social consequences of drinking than Whites, including unemployment, poor education outcomes, and alcohol-related legal problems (Boyd et al. 2003).

Recent research has demonstrated that African–American and White adolescents differ significantly in their exposure to traditional risk factors (Wallace and Muroff 2002). For example, drug use among urban African–American youth may be particularly misunderstood because, until recently, this group has been largely neglected in prevalence and intervention studies (Griffin et al. 2002). This is particularly problematic because there is evidence that inner-city African–American adolescents have limited access to early-intervention programs and are likely to partake in mandated rather than voluntary

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK

treatment, which often takes on a punitive rather than an encouraging undertone (Palmer and Liddle 1995). It is clear that substance use research with ethnic minority youth continues to be important in understanding how best to provide treatment to diverse populations.

Adolescent social networks

Adolescents' social development operates through the mechanism of social networks. We defined social networks as a visual representation of patterning of relationships that constitute one's social world. Specifically, for our research social networks are defined as up to five people that one associates with, hangs out with, and socializes with. Further, it is those people with whom one has contact at least once per month and with whom one has a "meaningful relationship." This means that the adolescent feels at least some influence (positive or negative) through some kind of social contact. These networks are critical to the promotion of protective as well as risky health behaviors (House and Landis 1988; Heaney and Israel 1997; Cattell 2001; Valente 2003). Specifically, social networks impact health status, health behaviors, and health decision-making. Research specific to social network influences on adolescent substance use support social theories of association, for example having smoking friends is related to smoking (Uberg et al. 1997; Unger and Chen 1999; Alexander et al. 2001; Valente et al. 2005). Other related explanatory theories are (a) social learning theory, through modeling and reinforcement (Bandura 1986), (b) differential association theory – learning about the positives of drug use through their friends' favorable attitudes toward drug use (Sutherland and Cressey 1974), and (c) the theory of reasoned action, which is the perceptions of (peer) social norms and one's expectations regarding the cost and benefits of engaging in the behavior, influences one's own intentions to act (Fishbein and Ajzen 1981).

Social network resources are considered lacking in neighborhoods that have high levels of concentrated poverty and are socially disorganized (Berkman and Clark 2003). Many low-resource urban youth live in these types of settings. Particularly with African–American families, social network research has demonstrated networks to be valuable in mediating stress. Extended families and the expansion of households to include kin and fictive kin are shown to be helpful ways of engaging in reciprocal assistance and therefore serve as protective social networks (Stapples 1988; Taylor et al. 1990). Thus, a social network research paradigm is particularly well suited for understanding low-resource urban youth health behaviors such as substance use (Trotter et al. 1995; Bauman and Ennett 1996).

Self-narrative development

A self-narrative approach to understanding psychological processes interprets the events in a person's life as story. The essence of narrative theory is based upon the concept of reflexivity, i.e., "... our capacity to turn around on the past and alter the present in its light, or to alter the past in the light of the present" (Bruner 1990, p. 109). Developmental researchers have examined various forms of self-narrative as a strategy for promoting psychosocial resilience and prevention (Nettles and Mason 2004). Central to understanding the dynamics and benefits of self-narrative in an effort to foster resilience, is the individual's capacity for integration. Integration is defined as the organization and use of experiences and observations about the self and multiple social and physical contexts (Yawkey and Johnson 1988). This integrative process begins in childhood; however, in late adolescence

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK

the disparate parts of the self begin to be linked to form a systematic sense of identity. This ability coincides with the development of socio-cognitive reasoning typical in adolescents.

In Siegel's (1999) review, he suggested that integration can be a crucial process that influences the trajectory of developmental pathways toward resilience or toward vulnerability. According to this review, studies on the relationship between neurological development and the interpersonal experiences of youth point to the importance of understanding the critical points of transitions for children and adolescents. These critical points of transition are representative of the inner disorganization, incohesion, and discontinuity of the activity in the developing brain of a child. Often youth will ''act-out'' this disorganization through behavioral disruption of their environments (Nettles and Mason 2004). Youth experiencing a critical transitional point such as substance use treatment, are thought to be in a unique transitional point and have a unique perspective regarding their self-narrative.

Our theoretical model for this study can be organized into two domains that influence treatment experience and substance use involvement: (a) social networks (characteristics of adolescents' networks in terms of protection against risk and support for positive outcomes and risk for negative outcomes) and (b) self-narrative/level of integration (self-organization, cohesion, and continuity). It is speculated that there is a relationship between the teens' self-narrative and the degree of self-integration, and the characteristics of their social network. Both of these domains have a direct and interactive effect on their substance abuse treatment experiences and ultimately their substance use involvement. For example, the more healthful and integrated self-narrative that an adolescent has, the less likely that he or she will experience inner disorganization. Thus, the adolescent with higher levels of integration will be less likely to seek a social network that supports the use substances to stabilize their inner incohesion and disorganization. The more integrated the teen is, the more likely he or she is to experience a helpful treatment experience.

The purpose of this study is to characterize the substance abuse treatment experiences along multiple dimensions such as treatment effectiveness, social network understanding, and self-narratives reflections, in order to extend theoretical models and generate more empirical quantitative research in adolescent addictions. The specific use of qualitative methods was chosen to provide insights into possible linkages among these theoretically and clinically important developmental mechanisms that can lead to differential outcomes. Qualitative approaches such as in-depth interviews can illuminate the various factors that might have contributed to the teens' quantitative outcome results, but that were not captured through traditional data collection strategies. These qualitative data can assist in explaining the causal links between adolescents' treatment experiences, social networks, their self-narratives, and their health outcomes that are too complex or nuanced for quantitative, forced-choice assessment strategies.

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

Research questions

Specifically, this study sought to answer the following research questions: (1) What are the most commonly named substances of abuse among adolescents and how do they evaluate these substances? (2) How do adolescents conceptualize their treatment experiences in terms of effectiveness? (3) How do adolescents understand the impact of treatment on their social networks? (4) How do adolescents completing a brief substance abuse treatment describe their self-narratives?

RIGHTSLINK

Table I. Characteristics of sample ($N = 23$).

	Percentages
Sex	
Male	61
Race	
White	42.1
African–American	31.6
Hispanic	21.1
Asian	5.3
Age	
17–22	61
14–16	39
Substance use treatment history	30
Lifetime substance use severity	
Dependence	56.5
Abuse	30.4
Psychiatric disorders	
ADHD	26.1
Major depressive disorder	17.4
Traumatic stress disorder	13
Generalized anxiety disorder	4.3
Family history	
Problems with alcohol use	69.6
Psychological problems	50
Problems with drug use	45.5

Methods

Sample and setting

Twenty-three adolescents enrolled in a brief, manualized substance use treatment program between January 2004 and September 2006 participated in this study. The Institutional Review Board of the primary author's university approved this study and all subjects and their legal guardians were fully informed and provided consent to participate. Participating adolescents were 42.1% White, 31.6% African–American, 21.1% of Hispanic origin, and 5.3% were Asian whose mean age was 16 years and the majority (58%) were male. Eligible patients were between 13 and 20 years of age, met at least the DSM IV-TR criteria for substance abuse, and had parental or guardian consent to participate if younger than 18 years old. Marijuana and alcohol abuse and dependency were the primary substance use diagnoses. Project collaboration among departments of psychiatry and pediatrics at a mid-Atlantic medical center provided a unique urban health-care sample where patients were primarily referred by health care providers, followed by juvenile justice, schools and private referrals. A department of psychiatry's child and adolescent outpatient program served as the treatment site. Sample characteristics are detailed in Table I.

Treatment program model

The current study examined a sample of adolescents enrolled in the Motivational Enhancement Therapy/Cognitive Behavioral Therapy-5 (MET/CBT-5) (Sample and Kadden 2001) treatment program. This manualized treatment is a brief approach that

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK

consists of two individual motivational enhancement therapy (MET) sessions, followed by three group cognitive behavioral therapy (CBT) sessions. The motivational portion of the treatment is based upon Miller and Rollnick's (2002) Motivational Interviewing (MI) model. Most recently MI is defined as a client-centered, yet directive therapeutic style with the explicit goal of enhancing readiness for change by helping patients explore and resolve ambivalence toward behavioral problems (Miller and Rollnick 2002). It can be understood as an evolution of Rogers's person-centered counseling approach (Rogers 1961), as MI elicits the client's own intrinsic motivations for change. MI is a supportive, empathetic, reflective, collaborative counseling style that honors client autonomy (Hettema et al. 2005). The two initial individual MET sessions are primarily intended to elicit adolescents' self-motivation to address their drug/alcohol use and to prepare them for the group sessions, with an introduction to functional analysis and the concept of triggers. The purpose of the three group sessions is to assist patients in the development of cognitive-behavioral skills useful for stopping or reducing drug and alcohol use.

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

Study design

As part of a larger study of 102 adolescents enrolled in a MET/CBT-5 treatment program, we sought to conduct in-depth interviews with 25% of the treatment sample. Adolescents were referred by health care providers, school officials, and parents and a university department of psychiatry's child and adolescent outpatient program served as the treatment site. Adolescents enrolled in the treatment program were primarily obliged to complete the treatment in order to maintain their educational or legal standing. All patient information was kept strictly confidential, and required adolescent acknowledgement and release to disclose information to parents. Patients were selected based upon interviewer assessment of appropriateness of the case (residential location of subject to determine the likelihood to return for the follow-up interview, and degree of being representative and illustrative of overall sample regarding mental health and substance use involvement) as determined by project staff, and subject willingness. A test of differences (t-test) was conducted between the selected sample and the remainder of the larger study sample on demographic characteristics, substance use treatment history and severity, psychiatric disorders, and family history of substance and psychological problems and no significant differences were found ($p > 0.05$). This test provided confidence that our sample of 23 was likely to be representative of the larger treatment sample and thus comparative to other urban adolescent treatment populations. All patients received incentives in the form of gift cards to participate in the interviews which lasted ≈45 min. Out of 25 adolescents who were recruited to participate in the study, 23 adolescents agreed, with 18 teens completing the semi-structured interviews and 20 teens completing the free listing and evaluation of drugs. This variation of participation with the two types of interviews occurred due to time constraints of the adolescents. All interviews were conducted upon the participants' completion of treatment by trained masters-level interviewers, who held degrees in anthropology, social work and counseling and were female and African–American. No differences in data quantity, quality, or completion of interviews were found among the interviewers.

Measures

Psychiatric and substance use measure. This measure was used primarily in the larger treatment effectiveness study. However, we used these data to describe our sub-sample in

RIGHTSLINK

more detail, to provide a fuller picture of these 23 adolescents. Substance use involvement and mental health was measured using the Global Appraisal of Individual Needs (GAIN) (Dennis 1999). The GAIN is a standardized clinical assessment that has been normed on adolescents and adults and documents participant-reported problems associated with the use, abuse, and dependence on drugs and alcohol. The core indices have Cronbach alphas over 0.85–0.90, items generally have retest reliability over 0.70, and self-reports were consistent with urine tests (kappa over 0.70) (Dennis 1999). This measure is capable of providing diagnostic information as noted in DSM-IV-TR (American Psychiatric Association 2000).

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

Semi-structured qualitative interview. In order to answer our research questions, a semi-structured interview was developed that focused on four primary areas: (a) drug listing and evaluation, (b) substance treatment reflections, (c) social network reflections, and (d) self-narrative reflections. The drug listing and evaluation was based on the qualitative methodology known as "Free Listing" (Weller and Romney 1988). Free listing is a technique that simply asks participants to list and describe all the elements that are part of a particular domain of interest (Trotter 1995). Patients were asked to name all the drugs including alcohol that they could and to then identify each one as either good or bad and provide an explanation for their evaluation. Interviewers left this as an open-ended question and did not comment or distinguish between illegal and legal drugs or alcohol in an effort to collect unmediated responses. A series of open-ended questions were then applied in a basic qualitative format (Merriam 2001) to better understand patients' experiences of the treatment, social networks, and their self-narratives.

Question selection was informed by the literature addressing the key role of social networks in understanding urban adolescent health behaviors (Mason in press; Mason et al. 2004; Valente et al. 2005) and in self-narrative as it relates to integration of self-concept and resiliency (Hermans 1997). The self-narrative questions were based upon Hermans' Self-Confrontation Method, which is an interview procedure to study the relation between valuations and type of affect organized into past, present, and future orientation questions. An open-ended inquiry addressing these topics allowed patients to lead the interview, with opportunity to elaborate aspects perceived as meaningful to individuals.

Some sample items from each area of the semi-structured interview are provided. The first area was drug listing, evaluation and reflections: "Looking back at your list of substances, what do you consider some of the good/bad things about 'x' substance?" The next area focused on treatment reflections: "What do you expect from treatment? Has the treatment had an effect on you? What part of treatment had the biggest effect on you?" The next area was social network reflections: "Now that you've spent some time learning about social networks, have you had any new thoughts about your own network? How has your substance use changed your social network?" The last area was the self-narrative reflection: *Past*: "How would you describe yourself and your life in the past? Was there in your past, a person or an experience/circumstance that greatly influenced your life and still affects you today?" *Present*: "How would you describe your life now? Is there in your present life something that is of major importance for you or has a great influence on you?" *Future*: "How do you want to describe yourself, your life in the future? Is there a goal or an object that you expect to play an important role in your future life?"

RIGHTSLINK

Data analysis

Interviews were tape-recorded and transcribed. Transcriptions were then coded for emergent themes by a team of researchers, using the four areas of inquiry as a principal guide following established coding and standardization of free-listing response procedures (Weller and Romney 1988; Trotter 1995). Use of software for qualitative data analysis is best supported when data from larger sample sizes are analyzed, and when data are highly complex and/or lengthy. In this study, our sample was fairly small, and the amount of data was limited enough to warrant use of traditional textual analysis by the research team, and thus no software was used. Themes were initially identified by each researcher and then verified through cross-checking with all three researchers. Using a 50% threshold, any themes that were not present in at least half of the patient interviews were eliminated. The principal investigator for the larger study also led the current research project. Two qualitative analysts were sought to work on the data analysis and interpretation of these data.

Results

Larger study quantitative results

Quantitative substance use outcome results from the larger study ($n = 102$) are first reported to provide perspective and context to the qualitative data from the present study. At the baseline assessment, 22% of subjects reported being abstinent from alcohol and drugs within the past 30 days. At the 3-month follow-up period, 47% of subjects reported being abstinent, 65% of subjects reported being abstinent at 6 months, and 45% of subjects reported being abstinent from alcohol and drugs at 12 months post treatment (Mason in press).

Qualitative results

Qualitative results are organized according to the four principle areas of inquiry: patient reflection on substances, treatment, social networks, and self-narratives. Two themes identified within the treatment reflection area included (a) new awareness related to substance use or impact of substance use, and (b) the perception that treatment was valuable or effective. Regarding the social network area, themes were derived through a qualitative assessment of patient narratives, identifying phrases, terminology, or experiences that were salient to the phenomenon of social networks. Patients reported increased awareness of both negative and positive influences by those in their networks throughout the treatment experience. Within the self-narrative area, patients expressed hopefulness regarding their (a) present, and (b) future lives, but did not report in a consistent manner thoughts about their past and thus did not meet the 50% threshold of required for inclusion and analysis of themes.

All data were analyzed by race (white and non-white, due to the small sample size), gender, and age group (early 14–16 and late 17–19 adolescence). No differences were found by race or gender among emergent themes across all four areas. However, age differences were noted in relation to treatment reflections. Younger patients, ages 14–16, more frequently perceived treatment as increasing their understanding of the repercussions of drug use. This included the consequences of drug use, effects of drugs upon their health, and the impact of their use upon family members. Patients between the ages of 17–19 provided more complex interpretations of the repercussions of drug use, with a deeper and

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK

lengthier reflection and multiple meanings assigned to treatment outcomes. For instance, not only did they express a new understanding related to the consequences of drug use, similar to the younger clientele, but they also cited greater self-understanding, improvement in their decision-making abilities, and greater awareness of their choices. In addition, compared to the younger participants, they appeared less concerned with exterior persons' reactions to their behaviors and more focused upon the inner process of change or decision making.

Free listing and evaluation of drugs

As can be seen in Table II, patients named 35 drugs, including alcohol and nicotine, for an average of 7.1 drugs listed per adolescent. Marijuana was the only drug to be listed on every patient's list. Marijuana also received the most ''good'' ratings, with 13 out of 20 (65%)

Table II. Free listing and evaluation of substances ($N = 20$).

Drug	Good	Bad	Good & Bad	Not listed	Not rated
Marijuana	13	6	0	0	1
Cocaine	0	15	0	5	0
Heroin	0	14	0	6	0
Crack	0	12	0	8	0
Ecstasy	0	11	0	9	0
Alcohol	5	2	0	11	2
Mushrooms	1	7	0	12	0
LSD	0	7	1	12	0
Acid	0	4	0	15	0
Adderall	3	1	1	15	0
Crystal Meth	0	5	0	15	0
PCP	0	3	1	15	0
Inhalants	0	3	0	17	0
Angel Dust	0	3	0	17	0
Hash	1	0	0	17	2
OxyContin	0	3	0	17	0
Robotusin	0	2	0	18	0
Medications	2	0	0	18	0
Valium	1	1	0	18	0
Insulin	1	0	0	19	0
Morphine	0	1	0	19	0
Speed	0	2	0	18	0
Muscle Relaxers	0	1	0	19	0
Steroids	0	1	0	19	0
Roofies	0	0	0	19	1
Ritalin	1	0	0	19	0
Concerta	1	0	0	19	0
Zoloft	1	0	0	19	0
Advil	1	0	0	19	0
Codeine	1	0	0	19	0
Opium	0	1	0	19	0
Barbiturates	0	0	0	19	1
Amphetamines	0	0	0	19	1
Welbutrin	1	0	0	19	0
Nicotine	0	1	0	19	0

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK

teens evaluating this drug as good and six rating it as bad, and one person not rating the substance. Four illicit drugs were rated as good, including marijuana, alcohol, mushrooms, and hash. Ten legal drugs were rated as good. Sixteen illicit drugs were rated as bad, including alcohol and nicotine, with seven legal drugs listed bad as well. Three substances were listed as both good and bad, including LSD, Adderall, and PCP.

Treatment reflection area

Theme: Awareness. When questioned about his or her experience in treatment, the vast majority of patients cited an increased awareness of the impact of drug use and alternatives to drug use. A representative statement was, "[treatment] has helped me realize that there's stuff there, [drug use] was definitely a problem." A unique feature of the MET/CBT-5 treatment protocol was the extensive assessment conducted prior to the first session with each adolescent. A summary of the assessment is used in the first session as is typical with many Motivational Interview protocols to begin to activate patient reflection on their behaviors (Sample and Kadden 2001). Therapist reporting and engaging the patient regarding frequency and quantity of drug use were cited as key tools for bringing about patient awareness of their drug involvement. For example, one patient explained:

> I guess some of the surveys might have really helped me because, you know, the question is presented, "how many times in the last 30 days have you done such and such," and when I actually say it out loud, like counting up the different days, I was like, "Oh, my gosh, that's really a lot."

Treatment also brought new awareness of alternatives to drug use for patients. A representative statement was, "[the treatment] will always help me to just think of other options, or just, choices." Other patients focused on how treatment taught them awareness of the physiological effects of drug use, such as "knowledge about addiction" or "effects of drinking." Several gained new understanding of the reasons for their drug use and the peers or family surrounding them that supported their continuing drug or alcohol use.

Theme: Treatment effectiveness. The majority of patients characterized treatment as a positive experience that affected change. Representational comments were, "treatment helped," and that treatment made them, "stop and think," regarding the drug use and its effects. This allowed patients to consider alternatives to heavy drug use. In some cases, patients cited treatment as effective in comparison to other programs. For example, one patient stated, "I'd been to treatment many times before ... And I just felt like this program was a lot more rational than the other programs ... It was ... more of a step in, like, the right direction." Similarly, one patient appreciated the fact that counselors did not, "tell me what I should be thinking or doing ... [they] just sort of had me come up with my own decisions."

Others framed treatment effectiveness in a more concrete way, expressing how treatment helped them to either control substance use or eradicated it completely. For example, one patient stated that treatment "was good because I stayed off drugs for a long time." Others explained that treatment taught them to consciously seek out positive peer support in times of need, rather than resorting to social networks that supported drug use. One patient explained, "it helped me map out ... who I can actually talk to and who I really can't."

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

Social network reflection

Theme: Positive support. During the initial assessment mentioned above, patients were asked to create personal goals for their treatment. The majority of patients cited the desire for improved social relationships (e.g., with family and friends) as a main reason for their reduction or cessation of drug use. The qualitative interviews reiterated the importance of relationships in the patients' lives, citing the use of their social network as a positive emotional support. For example, patients sought out friends for advice in times of need. One youth asserted, "My friends will always be there to . . . either talk about school, or girls, or I guess even drinking . . ." Another added that his friends, "Help me with other relationships."

Additionally, patient networks acted as positive influences related to cessation of drug use. Patients engaged in activities with peers that allowed them to manage stress and eschew drug use, including playing sports, playing musical instruments, or attending to homework. A positive, encouraging social network allowed patients to feel supported and reduced feelings of alienation and isolation; as one patient explained, he sought out his friends so that, "there is always someone there so [I'm] not, like, alone . . ."

Theme: Negative support. Conversely, the majority of patients also recognized the negative influences of certain individuals in their social network. These influences were often related to drug use. As one patient explained, "People in my network are the ones that I'm drinking with." Another patient said of family members, "Basically, everybody in the house was drinking." Another aspect of negative support was related to negative peer or familial behaviors. These increased the patients' stress levels and led to increased drug use as a coping mechanism. One patient described the negative stressor of his peers' prejudice, stating, "people label you, say 'alright man, Hispanic, young, tattoos, he's probably in a gang.'" Another patient cited avoidance of family members due to his stress-inducing role as care-taker, explaining, "My family doesn't get along . . . and I'm kind of the middle man."

Self-narrative

Theme: Current hopefulness. When patients were asked to describe themselves in the present, they expressed a hopefulness regarding sense of self and their lifestyles. They described their current selves with terminology that included "smarter", "stable," "happy," or "better." This optimism was often related to reduced drug use. A representative response was, "[Life is] a lot better than it was before. I mean, I don't drink, I don't smoke cigarettes, I don't smoke marijuana." Several patients cited hopefulness due to a new-found sense of direction or control. As one patient explained, "I guess it's more like in my hands now, instead of like my parents . . . I just feel like I'm in control."

Theme: Future hopefulness. As mentioned previously, future goals cited by patients in the intake assessment session included reduced or total cessation of drug use, and better relations with family and friends. Although the qualitative narrative also reflected reduction or cessation of drug use as part of a hopeful vision for the future, the teens' commentary was principally related to educational or career goals. Acceptance into college was the predominant goal of patients. One patient stated that life was, "getting better and better . . . I'm doing college applications right now." Others expressed hopefulness related to achieving fulfilling careers. Family members were cited as salient influences upon this future optimism. The youth perceived family as a primary support in achieving their career or

RIGHTSLINK

educational goals. As one patient asserted, "my parents and brother . . . will still be around and, like, getting me there."

Discussion

In general, these adolescents appeared to reflect upon their brief treatment experience as helpful, became more aware of their social networks, and articulated valuations of their present and future. An important finding from this study was the effectiveness of using an evidenced-based brief protocol successfully in a diverse, urban, community setting. The sample was 58% ethnic minority and thus represents a positive finding in the dissemination of evidence-based treatments into more diverse community-based settings. The overall encouraging evaluations provide support that the adolescents experienced this treatment as helpful and perhaps as culturally sensitive. In fact, in the larger study from where this sample was drawn, patients rated their clinical encounters as helpful, respectful, and culturally sensitive (Mason in press), thereby corroborating the results of this study. These are important outcomes due to the limited number of African–American adolescents participating in high-quality, evidence-based treatment. We acknowledge that we are making correlational speculations about the cultural sensitivity of this treatment based upon the overall positive results and the diverse make-up of the sample. Therefore, caution is warranted in interpreting these data and more research is needed into this complex area, as the current study did not explicitly seek to address this issue.

The free listing and evaluation of drugs have a particular salience to the motivational interviewing treatment approach. For example, we anticipated that many of the adolescents in this study would view marijuana as a good drug, and 65% of this sample rated it as such. Our anticipation of this finding was based on the observation that marijuana was the primary drug for which this sample was being treated. We also anticipated this finding due to the approach of Motivational Interviewing which does not try to convince the patients that drugs are bad and therefore they should stop. Instead, as a way to establish trust, the therapist will ask the patient to talk about all the good things, as well as the bad things about their drug of choice, known as the decisional balance technique. This technique fosters an accepting, understanding, and non-confrontational therapeutic style, by using the adolescents' own words to describe the benefits and the costs of their continued substance use. In this manner, the patients may have felt more comfortable evaluating marijuana positively, when asked during the listing of substances. Although for many of the adolescents in this treatment program, the use of marijuana was not "good" for them (e.g., causing problems at home, in school, and with the law). The finding that marijuana was perceived as "good" could illuminate a reality for many American adolescents; that marijuana is not seen as a bad drug in the same category as cocaine, heroin, and crack for example, of which all were rated as bad by this sample. This different approach to treatment was identified as a key component in the treatment's effectiveness or an "active ingredient" by many of the participants and was identified in contrast to traditional, confrontational styles typically enacted in treatment programs, schools, and in homes.

The social network findings provide further support for treatment approaches that incorporate this into their programming. Many patients stated that a new awareness of the protective as well as the risk qualities of their social networks provided confidence for their future. For example, persons cited in the patients' networks included peers and family members, who proved to have positive or negative influences upon their lives.

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK

Through treatment discussions, in-session practice, and homework, participants increased their understanding of how their social network influenced their behaviors and, in turn, came to understand the need to modify their networks toward more positive social influences. This new knowledge and skills increased confidence in their competency of the control and influence they possessed over creating a more positive social environment. Actively defining and evaluating their social networks and using this awareness for future planning appeared to be a strong theme across age, gender, and racial groups. These data support the social theory and research which demonstrates that an increase in the number and complexity of healthful social relations provides protection and enhances development (Bronfenbrenner 1979; Duncan and Aber 1997; Crouter and Larson 1998; Raudenbush and Sampson 1999; Sampson 2003).

It is interesting to note that no theme emerged from the past self-narrative questions. It could simply be that the variation of the past narratives was greater than the collective present and future narratives and thus no theme emerged beyond the 50% threshold needed to be used in the analysis. The past, with its unique signatures and historical context, is less likely to be thematic as compared to the more predictable positive and hopeful interpretations of the patients' present and future self-narratives (Hermans 1997). More research is needed to confirm this finding as generalizable, but it is speculated that the range of historical events and subsequent self-narrative formulations for entering treatment are unique enough to elude our attempt at thematic categorization. Moreover, connecting to current and future hopefulness is a common treatment ingredient and could be an underlying mechanism of integration of self, which this treatment may have contributed to, and thus provided the foundation for more positive current and future self-narrative evaluations.

Finally, the treatment and social network reflections support the critical developmental task of constructing an integrated adolescent self. For example, increased consciousness of the self in relation to drug use and the consequences, as well as a clearer sense ones' social self, could be seen as markers for a firmer integration of the adolescent self. This type of integration is often supported by advancements in processes such as emotional/self-regulation and competency attainment (Nettles and Mason 2004). It is speculated that the combination of motivational interviewing approaches and cognitive-behavioral training stimulates the emotional/self-regulatory processes and are then reinforced by competency building through successful completion of the treatment experience.

Primary limitations of this study were the sample size and the non-longitudinal nature of the design. While 23 cases is a respectable size for qualitative research (Weller and Romney 1988), a larger sample could have provided increased confidence in the findings. Another limitation was that the interviews took place upon the patients' completion of treatment and thus could represent reflections colored by the honeymoon effect. Many patients report improvement during the initial 3-month window following treatment and it is unknown if the patients' reflections would be different if a longitudinal design was employed. Another limitation was the sample was not randomly selected and therefore our findings may be subject to selection bias from the project staff. Although we tested the sample for differences on psychiatric, familial, and substance abuse issues against the larger study sample and found no differences, caution is warranted regarding the generalizability of the findings. Finally, the research questions focused on treatment effectiveness and not ineffectiveness. While effectiveness is a standard construct used in treatment research, explorations of what was ineffective could bear light into unexamined treatment issues that may have direct implications for improving outcomes.

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK

Nevertheless, these findings provide linkages to recent research that has established important connections between key processes such as patient satisfaction, quality of treatment, and patient retention, which in turn are related to better follow-up outcomes (Hser et al. 2004). The findings from this study underscore the need to address all of these key process components in order to sustain positive outcomes for urban youth. As evidence-based treatments continue to be developed and tested, findings from this study may play an important role for modifying brief treatments for diverse adolescents. In particular, the social network component could be examined in more detail experimentally with larger samples to determine the impact of the social network ingredient, to test the dosage of this ingredient, and to statistically examine the hypothesized direct and interactive effects with varying levels of integration and differing self-narratives. Future research should continue to focus on the dissemination of efficacious treatments into community settings and simultaneously explore the meaning of drug use and the treatment experiences of participating adolescents, through larger, randomly selected samples of diverse adolescents. In addition, there is a need for continued research on treatment with diverse youth to determine the cultural relevancy of standardized treatment. These types of rigorous studies would continue to build the evidence base for understanding service delivery according to best practices in order to improve treatment quality and outcomes for a diverse panel of patients.

Declaration of interest: The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

References

Alexander C, Piazza M, Mekos D, Valente TW. 2001. Peers, schools, and adolescent cigarette smoking: An analysis of the national longitudinal study of adolescent health. Journal of Adolescent Health 29:22–30.

American Psychiatric Association. 2000. Diagnostic and statistical manual of mental disorders. 4th ed. Text Revision, Washington, DC: American Psychiatric Association.

Bandura A. 1986. Social foundations of thought and action: A social cognitive theory. New Jersey: Prentice Hall.

Bauman K, Ennett S. 1996. On the importance of peer influence for adolescent drug use: Commonly neglected considerations. Addiction 91:185–198.

Berkman C. 2003. Neighborhoods and networks: The construction of safe places and bridges. In: Kawachi I, Berkman L, editors. Neighborhoods and health. New York: Oxford University Press. pp 288–302.

Boyd MR, Phillips K, Dorsey CJ. 2003. Alcohol and other drug disorders, comorbidity, and violence: Comparison of rural African American and Caucasian women. Archives of Psychiatric Nursing 17:249–258.

Bronfenbrenner U. 1979. The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.

Bruner J. 1990. Acts of meaning. Cambridge, MA: Harvard U. Press.

Caetano R, Clark CL. 1998. Trends in alcohol consumption among Whites, Blacks and Hispanics: 1984 and 1995. Journal of Studies on Alcohol 59:659–668.

Cattell V. 2001. Poor people, poor places, and poor health: The mediating role of social networks and social capital. Social Science and Medicine 52:1501–1516.

Crouter A, Larson R. 1998. Editors notes. In: Crouter A, Larson R, editors. Temporalrhythms in adolescence: Clocks, calendars, and the coordination of daily life. San Francisco: Jossey-Bass. pp 1–3.

Dennis M. 1999. Global Appraisal of Individual Needs (GAIN): Administration guide for the GAIN and related measures (Version 1299). Bloomington, IL: Lighthouse Publications.

Dennis ML, Babor TF, Diamond G, Donaldson J, Godley SH, Titus JC. 2000. The Cannabis Youth Treatment (CYT) experiment: Preliminary findings. Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, Department of Health and Human Services, Rockville, MD.

Donovan JE. 2004. Adolescent alcohol initiation: A review of psychosocial risk factors. Journal of Adolescent Health 35:529.e7–529.e18.

RIGHTSLINK

Duncan G, Aber L. 1997. Neighborhood models and measures. In: Brooks-Gunn J, Duncan GJ, Aber LJ, editors. Neighborhood poverty: Context and consequences for children. New York: Russell Sage Foundation. pp 62–78.

Fishbein M, Ajzen I. 1981. On construct validity: A critique of Miniard and Cohen's paper. Journal of Experimental Social Psychology 17:340–350.

Griffin K, Botivin G, Scheier L, Epstein J, Doyle M. 2002. Personal competence skills, distress, and well-being as determinants of substance use in a predominantly minority urban adolescent sample. Prevention Science 3:23–33.

Heaney CA, Israel BA. 1997. Social networks and social support. In: Glanz K, Frances ML, Barbara RK, editors. Health behavior and health education: Theory, research, and practice. San Francisco: Jossey-Bass Publishers. pp 179–205.

Hermans H. 1997. Self-narrative in the life course: A contextual approach. In: Baberg M, editor. Narrative development: Six approaches. Mahway: Lawrenece Erlbaum. pp 223–264.

Hettema J, Steele J, Miller WR. 2005. Motivational interviewing. Annual Review ofClinical Psychology 1:91–111.

House JUD, Landis K. 1988. Structures and processes of social support. Annual Review of Sociology 14:293–318.

Hser Y, Evans E, Huang D, Anglin D. 2004. Relationship between drug treatment services, retention, and outcomes. Psychiatric Services 55(7):767–774.

Palmer R, Liddle H. 1995. Adolescent drug abuse: Contemporary perspectives on etiology andtreatment. In: Blau G, Gullotta T, editors. Adolescent dysfunctional behavior. Newbury, Park: Sage. pp 113–148.

Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. 2007. Monitoring the Future national results on adolescent drug use: Overview of key findings, 2006 (NIH Publication No. 07-6205). Bethesda, MD: National Institute on Drug Abuse.

Mason MJ. Social network characteristics of urban adolescents in brief substance abuse treatment. Journal of Child and Adolescent Substance Abuse (In press).

Mason M, Cheung I, Walker L. 2004. Substance use, social networks and the geography of urban adolescents. Substance Use and Misuse 39(10–12):1751–1778.

Merriam SB. 2001. Qualitative research and case study applications in education. 2nd ed. San Francisco: Jossey-Bass Publishers.

Miller WR, Rollnick S. 2002. Motivational interviewing: Preparing people for change. 2nd ed. New York: Guilford Press.

National Institute on Alcohol Abuse and Alcoholism (NIAAA). 2000. Alcohol involvement over the life course. Tenth Special Report to the U.S. Congress on Alcohol and Health: Highlights from Current Research. Bethesda, MD: Dept. of Health and Human Services, NIAAA. pp 28–53.

Nettles S, Mason MJ. 2004. Zones of narrative safety: Promoting psychosocial resilience in young people. The Journal of Primary Prevention 25(3):359–373.

Office of Applied Studies, Substance Abuse and Mental Health Services Administration. 2005. Results from the 2004 National Survey on Drug Use and Health: National findings (DHHS Publication No. SMA 05-4062, NSDUH Series H-28). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Raudenbush S, Sampson R. 1999. Ecometrics: Toward a science of assessing ecological settings, with application to the systematic social observation of neighborhoods. Sociological Methodology 29:1–4.

Rogers C. 1961. On becoming a person. Boston: Houghton Mifflin.

Sample S, Kadden, R. 2001. Motivational enhancement therapy and cognitive behavioral therapy for adolescent cannabis users: 5 Sessions, Cannabis Youth Treatment (CYT) Series, Vol. 1. Rockvillen, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration. BKD384.

Sampson RJ. 2003. Neighborhood-level context and health: Lessons from sociology. In: Berman L, editor. Neighborhoods and health. New York: Oxford University Press. pp 132–146.

Siegel DJ. 1999. The developing mind: Toward a neurobiology of interpersonal experience. New York: Guilford.

Stapples R. 1988. The black American family. In: Mindel CH, Habenstein RW, Wright J., Jr., editors. Ethnic families in America. Englewood Cliffs: NJ: Prentice-Hall. pp 303–324.

Steinman KJ, Schulenberg J. 2003. A pattern-centered approach to evaluating substance use prevention programs. In: Damon W, Peck SC, Roeser RW, editors. New directions for child and adolescent development, Vol. 101: Person-centered approaches to studying development in context. San Francisco: Jossey-Bass. pp 87–98.

Sutherland EH, Cressey DR. 1974. Criminology. 9th ed. Philadelphia, PA: Lippincott.

Taylor R, Chatters L, Tucker M, Lewis E. 1990. Developments in research on black families: A decade review. Journal of Marriage and the Family 52:993–1014.

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK

Trotter R. 1995. Drug use, AIDS, and ethnography: Advanced ethnographic research methods exploring the HIV epidemic. In: Lambert E, Ashery R, Needle R, editors. Qualitative methods in drug abuse and HIV research. National Institute on Drug Abuse. NIDA Research Monograph 157. Rockville, MD: U. S. Department of Health and Human Services, National Institutes on Health, National Institute on Drug Abuse.

Trotter R, Bowen A, Potter J. 1995. Network models for HIV outreach and prevention programs for drug users. NIDA Research Monograph 151:144–180.

Unger JB, Chen X. 1999. The role of social networks and media receptivity in predicting age of smoking initiation: A proportional hazards model of risk and protective factors. Addictive Behaviors 24:371–381.

Urberg KA, Degirmencioglu SM, Pilgrim C. 1997. Close friend and group influence on adolescent cigarette smoking and alcohol use. Developmental Psychology 33:834–844.

Valente T. 2003. Social Networks influence on adolescent substance use: An introduction. Connections 25(2):11–16.

Valente T, Unger J, Johnson A. 2005. Do popular students smoke? The association between popularity and smoking among middle school students. Journal of Adolescent Health 37:323–329.

Wallace JM, Muroff JR. 2002. Preventing substance abuse among African American children and youth: Race differences in risk factor exposure and vulnerability. The Journal of Primary Prevention 22:235–261.

Weller SC, Romney AK. 1988. Systematic data collection. Newbury Park, CA: Sage.

Williams RJ, Chang SY, Addiction Centre Research Group. 2000. A comprehensive and comparative review of adolescent substance abuse treatment outcome. Clinical Psychology: Science and Practice 7:138–166.

Winters KC. 1999. Treating adolescents with substance use disorders: An overview ofpractice issues and treatment outcomes. Substance Abuse 20:203–225.

Wright D. 2004. State Estimates of Substance Use from the 2002 National Survey on Drug Use and Health (DHHS Publication No. SMA 04–3907, NSDUH Series H-23). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Yawkey TD, Johnson JE. 1988. Integrative processes and socialization: Early to middle childhood. Hillsdale, NJ: Erlbaum.

Addict Res Theory Downloaded from informahealthcare.com by Nova Southeastern University on 09/22/10
For personal use only.

RIGHTSLINK