# Dissonance-Based Interventions for Substance Using Alternative High-School Youth

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## Abstract

This article describes an innovative new intervention tailored to older youth who are already abusing drugs, but who are not diagnostically ready for treatment. The basic tenet of this intervention is to utilize adolescents engaged in drug use as "experts" in the prevention curriculum adaptation activity. This activity then serves as a mechanism for their dissonance-based change. This process is designed to intervene with drug abusing youth prior to their development of substance dependence. The community-based design grew from a United States federally funded NIDA project (National Institute of Drug Abuse Mentored Research Scientist Award) which found that the youth who conduct program adaptations were effectively engaged, animatedly discussing the payoffs and downsides of drug and alcohol abuse. It is maintained through this research that dissonance between their role of "Preventionist" and their own substance abuse behaviors lead to shifts in attitudes and behaviors. Dissonance-based interventions (DBIs) have been successfully utilized for positive behavioral change with a variety of disorders, but have not yet been implemented with substance abusing youth. Findings of pilot research are shared along with implications for future research and interventions.

### Keywords

adolescence; substance abuse; prevention; intervention; dissonance

## Introduction

Youth who have begun using substances are difficult to reach through any substance-related intervention because they can be ardent about their substance abuse, and often report experiencing more positive pay-offs than negative consequences (Johnston, O'Malley, Bachman & Schulenberg, 2004). This may be attributed to what Janis & Mann (1977) refer to as "decisional balances". In the United States, the high social acceptability (among adolescent peers) of alcohol and marijuana use makes prevention efforts even more difficult, especially for those already engaging in substance abuse behaviors (Elickson, Tucker, Klein & McGuigan, 2001). When consequences do arise, these youth often embrace the belief that "it isn't a serious problem" or "it's too late; I've already made my decisions" (Holleran & Hopson, 2006). While many youth who experiment with substances will discontinue use or "age out," others will move on to abusing substances and will become at risk for dependence. Therefore, interventions to engage drug abusing youth prior to serious consequences are needed.

In the substance abuse literature of the United States, the term "use" is sometimes used interchangeably with "abuse" when referring to children and adolescents. As established in

the classic work of Newcomb and Bentler (1989), the differentiating characteristic discerning the definition of "use" from "abuse" is the presence of negative consequences to self or others. Even the potential for negative consequences warrants the term "abuse" by this definition. For example, a student who shows up at school under the influence of a substance may not have immediate cost to the student, but the behavior itself embodies the risk for negative consequences. Moreover, *any use* by children and adolescents can negatively affect cognitive, social, and physical aspects of development (Lubman, Yücel, & Hall, 2007). In addition, in the United States, one must note the illegal nature of underage use of alcohol and illicit substances including marijuana. Therefore, for the purpose of this article, all use will be referred to as abuse due to the pervasiveness of use in the adolescent population studied and the negative consequences related to substance use.

The United States Institute of Medicine identified three categories of prevention that are appropriate for participants with different levels of risk factors: universal, selective, and indicated (Mrazek & Haggerty, 1994). Prevention interventions in the United States are predominantly universally implemented, failing to target and impact the youth that need it most. These youth are essentially caught in between prevention and intervention services and have been referred to as "diagnostic orphans" (Pollack & Martin, 1999; Kaczynski, Pollock, & Martin, 1999). Universal and even selective prevention programs assume that the recipients are still abstinent and have not experimented or currently using substances. The students who are already initiated into drug use (abuse, by definition, due to the developmental, physical, and legal dangers of such use) often find such interventions to be ineffective or even humorous (Holleran & Hopson, 2006). For example, this population report playing on ironies by wearing their prevention program's t-shirts while abusing substances, an act that clearly indicates disregard or ridicule towards prevention messages.

This article focuses on what is referred to in the literature as indicated (or tertiary) prevention interventions. Indicated approaches are designed for individuals who manifest a risk factor or behavior that identifies them as being at high risk for future development of serious manifestations of the problem and related consequences (Kutash, Duchnowski, & Lynn, 2006; Sloboda & David, 1997). Indicated prevention and risk reduction have been implemented with a number of populations, including college students (Harrington, Brigham, & Clayton, 1999); students in disciplinary programs in schools (Daugherty, 2007); youth with behavioral problems and their families (Ferrer-Wreder, et al., 2003; Szapocznik and Williams, 2000; Alvarado & Kumpfer, 2000); and incarcerated youth (Eggert & Randall, 2006). These interventions are designed for youth who are already experimenting with substances or are engaging in other high risk behaviors (Sloboda & David, 1997). Indicated interventions are rarely utilized in school settings because schools in the U.S. typically embrace a universal model aiming at non-use rather than other models which acknowledge student substance use as part of the picture. The reasons for this vary from systemic denial about the seriousness and pervasiveness of the problem, fear of parent and constituent blame and anger at the school for the presence of such issues, and an inability to provide adequate services for students who emerge with substance abuse requiring more intensive interventions (either due to cost or legal aspects).

In response to the lack of understanding and/or viable school-based intervention options for parents, school staff, and counselors adolescents that have already started abusing substances in the United States are often prematurely admitted to addiction treatment before they are at a stage of readiness to respond to the intensive programs. Some youth encounter significant "motivational barriers" when coerced into treatment (Winters, 1999). Approximately half of the youth in treatment relapse in the first 3 months following discharge (Brown, Mott & Myers, 1990), and 65–80% relapse after 6 months (Brown, 2001; Cornelius et al., 2003). The cost of this revolving door to American society is dramatic;

research has shown that every dollar invested in prevention achieves a savings of up to $7 USD in areas such as substance abuse treatment, not to mention their wider impact on the trajectory of young lives and their families (NIDA, 2003).

The U.S. government has emphasized that research around drug and alcohol use and abuse during late adolescence and emerging adulthood is a particularly important area because late adolescence is a significant transition point in human development, this transition often marks addictive use of substances for at risk individuals (NIDA, 2003), and the initiation of use of so-called "hard drugs" often takes place during this period (NIDA, 2003). Regardless of this imperative, there is a dearth of programs specifically designed to intervene with high school students around drug and alcohol issues (Dent, Sussman, McCullar & Stacy, 2001). Most U. S. prevention interventions focus on middle school students (ages 11–14), and are designed for family and traditional school settings (Kumpfer, Molgaard, & Spoth, 1996; Eggert, Nicholas, & Owen, 1995; Sussman, et al., 1997). Drug abuse prevention programs that have been effective with general populations of younger adolescents in junior high and middle school are less likely to be as effective with older, at-risk high school students between the ages of 14 and 17 (Sussman, 1996). Outcomes do tend to improve when tailored for age (White, Taylor & Moss, 1992). School counselors in the United States often use programs developed for other youth populations or invent their own interventions out of necessity (Ringwalt et al., 2003). The few programs for high-risk high school youth [i.e., Project Toward No Drug Abuse (Sussman, 1996) and Reconnecting Youth (Eggert, Nicholas, & Owen, 1995)] note that alternative school youth receiving a tailored intervention experience greater reductions in substance use (Dent, et. al, 2001). In short, this research is recommended to address: a) the gap between prevention and treatment, b) the need for developmentally appropriate, engaging interventions for older youth; and c) the specific needs of high risk substance-abusing alternative school youth.

## Alternative School Settings

In the United States, alternative schools are unique in a number of ways and therefore require prevention programming that fits their distinct student populations. There are a variety of schools that fall within the category of "alternative." For the purpose of this manuscript, "alternative school" is defined as temporary settings put in place by school districts for youth at risk of school failure in the traditional public education system. Over one million students currently attend alternative schools nationwide and the number of students enrolled in such settings has increased significantly in recent years (Lehr, Moreau, Lange, & Lanners, 2004; Kleiner, Porch, Farris, 2002). Although alternative schools report needing interventions for preventing health problems, especially depression and substance abuse, relatively little research has examined implementation and effectiveness of prevention interventions in these settings (Kubik, Lytle, & Fulkerson, 2004; Sussman et al., 1997).

Youth in alternative high school settings in the U.S. tend to report higher rates of substance use than those attending traditional schools and are more likely to use alcohol and drugs as coping strategies (Lehr et al., 2004; Vaughn, Slicker, & Van Hein, 2000). In the most recent U.S. Center for Disease Control (CDC) study of alternative school's health behaviors, over 92% of alternative school student respondents said they had consumed alcohol at least once, and two thirds had done so during the past month (Grunbaum et. al., 1998). More than 85% of students reported smoking marijuana and over a third had tried cocaine at least once. Furthermore, almost 40% of students said they had been offered or had sold an illegal substance on school property during the past year (Grunbaum, Lowry, & Kann, 2001). Alternative school youth are also at risk of substance use later in life (Rohrbach, Sussman, Dent, & Sun, 2005). These youth, for example, are more likely to report a number of risk

behaviors, such as violence, substance use, and suicide attempts, than students in mainstream schools (Grunbaum, Lowry, & Kann, 2001; Kubik, Lytle, & Fulkerson, 2004). In addition to the students' distinguishing attributes, alternative schools are ripe for innovative prevention programming due to their creative milieus, progressive administrators, and lack of denial about their students' high rates of substance use and abuse (Tortolero et al., 2008).

## Dissonance-Based Interventions (DBIs)

DBIs have been utilized in clinical and medical settings with adults and adolescents, but thus far have not been utilized with substance abusing youth in schools. According to Cognitive Dissonance Theory (Festinger, 1957), individuals seek consistency in their perceptions; when an inconsistency arises between attitudes and behaviors (i.e., dissonance), something must change to remedy the internal discrepancy. Literature supports the argument that dissonance is a motivational state that drives individuals to implement strategies to diminish the psychological discomfort (Elliot & Devine, 1994). Therefore, it has long been known that behaviors can change to accommodate attitudes (Festinger, 1957). Such changes in attitude have been found resulting from dissonance-based interventions with youth in a low income neighborhood creating community awareness videos (Ager, Parquet, & Kreutzinger, 2008), eating disordered adolescent girls (Stice et al, 2008), college student smokers who created anti-smoking videos (Simmons, Webb, & Brandon, 2004), and in a historical study of college females who created legalization of marijuana videos (Nel, Helmreich, & Aronson, 1969). Dissonance-based interventions allow for shifts from pro-drug norms to drug-averse norms, thus resulting in the changed behavior of less substance use. It is the premise of this research that adolescents who adapt prevention curricula by creating drug prevention scenarios and videos will experience cognitive dissonance and subsequently shift behaviors.

## Shifting Stage of Change

In conjunction with the DBI approach, this intervention is based in the Transtheoretical Model which explains how people intentionally change behaviors (Prochaska & DiClemente, 1992). The Transtheoretical model (Conners, Donovan, & DiClemente, 2001) posits that health behavior change involves progress through distinct stages: Precontemplation (prior to awareness of problem), Contemplation (some awareness), Preparation (motivation to take action), Action (behavior change), Maintenance/Relapse (presence or absence of ongoing change) (Prochaska & DiClemente, 1992). Pallonen (1998) broadened the model to adolescents, finding that adolescents and adults were remarkably similar in their responses to measures of readiness for change. While there is some question about the definitive nature of change stages in adolescence, Werch (2001) has successfully applied the Stages of Change model to adolescent prevention efforts. His work recommends the following: (1) trials of stage-based preventive interventions comparing adapted preventive interventions with comparable generic programs within various youth populations and settings; (2) exploration of a wider range of stage-based strategies and communication modes, including media, interpersonal, and environmental approaches; and (3) interventions tailored to pre-intervention stage of substance use acquisition that address a range of risk and protective factors; these interventions target older youth (Werch, 2001). Rather than relying solely on stage change determination, the key to understanding risky choices in this population is knowledge and integration of factors in their decision-making process (Nygaard, Waiters, Grube, & Keefe, 2003). Studies support that youth who are not motivated for change will typically not respond favorably to interventions, and that stage-based, tailored interventions are important with drug-initiated youth (Werch, 2001). The dissonance experienced by young people and exploration of the payoffs and down-sides of

their substance related attitudes and behaviors can lead to healthier and safer choices, tipping the scales of decisional balance (Migneault, Pallonen, & Velicer, 1997; Plummer et al., 2001).

## Evidence-based Substance Abuse Curriculum

The medium for this research's intervention, the keepin' it REAL (kiR) program, is a Substance Abuse and Mental Health Services Association (SAMHSA) model program developed by a team of substance abuse prevention researchers with expertise in culturally grounded interventions (Marsiglia & Hecht, 2005). The originators utilized youth input towards the goal of creating a substance prevention program for minority youth. It is based on four drug resistance strategies (refuse, explain, avoid, and leave, thus R.E.A.L.) While the original curriculum is teacher-led, with students receiving the curriculum, this research, by comparison, implements a model in which the focus in on the student's input above and beyond the curriculum information.

Prevention science has long maintained that a sense of "ownership" is critical to programmatic success (Price & Lorion, 1987; Kelly, 1987). Therefore, through the adaptation process, the students are emboldened as prevention leaders rather than recipients. These youth are engaged as "Preventionists" in the program development. The cognitive science and education research literature supports the idea that being in a position of helping others learn is a more powerful mechanism of gaining awareness and insight than receiving information didactically (Biswas, Leelawong, Schwartz & Vye, 2005). This model establishes that dialogue and critical thought are a crucial substitute for "banking" education in which knowledge is "deposited in the empty vault of a learner's mind" (Freire, 1971, p. 112) – the interactive dialogue during adaptation requires the youth to be authentic and creative, educating themselves and each other. "Praxis" an active, continual movement between action and reflection (Freire, 1971) is used in comparison to more passive, didactic methods of teaching curricula.

Another distinguishing feature of this innovative intervention is that it fully embraces the social work knowledge and ethics base. Instead of engaging youth from a "problem perspective" (i.e., you have a problem and need intervention), it engages them from a strengths perspective (Saleeby, 1992), as experts in drugs and alcohol; experts in their own life experiences. Being appointed as experts instills pride and augments self esteem and efficacy. While engaged in the adaptation process, the youth become powerfully connected with anti-drug messages and focus on real consequences that they themselves have experienced.

This project shifts from a deficit model to one that notes resilience. Resilience refers to those who experience challenging conditions without showing profound negative consequences (Greene, 2002). The youth involved in this project are valued for their life experience, coping, and perspective despite their previous choices and consequences related to substances.

## Preliminary Studies

The first pilot study related to this research (Holleran, Taylor-Seehafer, Pomeroy, & Neff, 2005) explored youth peer interactions, cultural identity, and reactions to the culturally grounded videos in the keepin' it REAL program. The videos were created for and by youth. Findings indicated the following: (1) adolescents in non-school settings readily participate in research activities, (2) adolescents in these settings are ethnically heterogeneous, (3) the respondents willingly report high levels of substance abuse, and (4) these youth felt that the

*keepin' it REAL* curriculum did not capture their culture and experiences which points towards the need for adaptation.

Next, the project discussed in this article was funded by the United State's National Institute of Health's (NIH) National Institute on Drug Abuse (NIDA) in 2003. It researched the keepin' it REAL program's culturally grounded substance abuse prevention with high risk youth in community settings. It examined culturally adapted substance prevention programming with a broad range of high risk adolescents between 14–19 y/o (Holleran, Sagun, Hopson & Goldbach, 2007). The high-risk nature of the population was supported by their high rates of drug use and related attitudes and behaviors.

The research was conducted in two phases, the first focusing on the adaptation of the curriculum and the second implementing the adapted versus original curricula and comparison groups. The serendipitous Phase I findings are particularly relevant in that the qualitative data suggest that the youth that participated in the adaptation process became more aware of their own use and rates of use, experienced some cognitive dissonance between their use and their role as "Preventionist," and increased their perceptions of the consequences of substance use, which they clearly depicted in the adapted scenarios and videos. The findings include the following: (1) adaptation processes engage youth who are often averse to prevention programs and messages, (2) the group which received the adapted curriculum demonstrated significantly greater decreases in their acceptance of liquor than the original and comparison groups, and (3) by engaging older adolescents (who often have already used or even abused drugs) as experts, the study qualitatively supported adaptation processes to improve the curriculum, and the actual act of adapting the evidence-based program for others shifts attitudes and behaviors regarding drugs and alcohol (Holleran Steiker, Goldbach, Hopson, & Powell, under review; Holleran Steiker, 2008). This research established the viability of the intervention and research procedures included in this proposal.

## Cultural Adaptation Procedures

High risk youth at ten sites in Texas, USA, were recruited as "experts" to help culturally ground the keepin' it REAL curriculum for their particular settings. The settings included: four alternative schools, a homeless youth shelter, a juvenile justice day program, a YMCA-run program for youth at low-income housing centers, a GLBTQ (gay, lesbian, bisexual, transsexual, and questioning) youth drop in center, and a youth advocacy group on the Texas-Mexico border. Youth at each site, in groups of 6–8 youth, recreated the intervention's workbook and videos for their peers using a procedures manual created by the research team (Holleran, Hopson, & Gerlach, 2005). A total of 169 youth participated in this phase of the project.

To ensure fidelity to the intervention, no changes were made to the core curriculum (i.e., the program as written in the facilitator manual). The adaptations included local nuances such as drugs of choice, settings, language, styles, drug offer particulars, salient consequences, and relevant clothing and music in videos. Adaptations to the curriculum were structured so that the videos and scenarios covered the same topics as the original curriculum. Adaptation sessions were supervised by staff at the project site in collaboration with a member of the research team. The facilitators emphasized that at least 75% of the group would need to have had personal experience with the newly adapted scenario.

This process allowed for the participants' actual experiences rather than perceptions to be captured. This process also prompted the youth to stay in touch with their own negative drug-related experiences and to prevent the tendency to want to portray "worst possible scenarios" and "scare tactics", as substance abuse prevention programs. Involving such

tactics are known to be rarely effective with young people (Darkes and Goldman, 1993; Stewart, Conrod, Marlatt, Comeau, Thush, & Krank, 2006). A bloody car crash, for example, may make an interesting movie, but unless youth have witnessed or experienced it, it has little impact as a substance prevention intervention.

Groups of participants at each site also created new prevention videos. It has been found that for some students, creating a video facilitates learning about drugs in a productive and proactive manner which, according to Nobles & Goddard (1992), is a superior prevention strategy to teaching adolescents how to avoid substance abuse. Each of the sites had the youth participants conceptualize, script, act and film four drug prevention videos, one for each refusal skill (Refuse, Explain, Avoid and Leave, thus the acronym R.E.A.L.). Each site filmed on their agency grounds so the location would be recognizable to the youth and their peers who would later receive the adapted curricula.

From the well established research on elevated risk factors in alternative school youth (Sussman et al., 1995), it is logical to extrapolate that alternative school youth experimenting with substances are at a much higher risk for escalation of abuse/dependence than their regular high school counterparts. This dissonance-based intervention aims to shift readiness for change and drug/alcohol abuse behaviors in high school aged youth, in order to prevent drug dependence and serious negative consequences related to heavy use.

## Methods of Evaluation

The study employed ethnographic methods (focus groups and naturalistic process evaluation) and quantitative surveys. These methods were used to study the alternative school adolescents' process of adapting the curriculum to suit their culture as well as the specific mechanisms of adaptation and the behavioral impact of participating in this process. Youth (n=169) participated in a focus group before and after developing the videos and scenarios to learn about their beliefs, attitudes and experiences related to substance use, as well as prevention curricula. They were given small monetary incentives and it was noted that they were recruited as expert consultants in the contexts in which youth use substances.

Measurement instruments included questions about substance use, attitudes and intentions indicative of behaviors. Items about substance use amounts and frequency came from the Texas School Survey of Substance Use (TCADA, 2000) validated for use with students in grades seven through twelve. These survey items were analyzed to assess for problems with misinterpreting questions, dishonest responses, and failure to follow instructions. The analysis revealed an insignificant number of students whose responses were affected by these problems (TCADA, 2000). Items adapted from the questionnaire developed for the original Keepin' it REAL research conducted in Phoenix were used to measure intentions to accept offers of substances. These items were also used in the pilot study examining youth perceptions of the KIR videos (Holleran et al., 2005). These items were evaluated for reliability and demonstrated good internal consistency with an alpha of .82 (Hecht et al., 2003). The adapted items used to measure intentions to accept offers in this study were also part of the pilot study (Holleran et al., 2005). Reliability analyses from these data indicate that the questions in the attitudes toward accepting offers demonstrate good internal consistency with an alpha of .95.

Data collection involved semi-structured focus groups with students before and after the intervention. The focus group questions were open-ended, and included topics related to the research questions and theoretical framework for the study: culture of substance use and offers, substance use by peers, approaches that would be useful in preventing abuse of substances, videos used in the curriculum, components of the curriculum considered useful, and components of the curriculum considered not useful. Qualitative reviews of students'

drug use and attitudes were conducted with 169 young people. This manuscript focuses on the qualitative findings with this group.

The qualitative analysis began with open coding of focus group transcriptions in which two researchers independently assigned codes to statements related to the research questions. The transcriptions were analyzed for themes related to substance use, attitudes about substances, attitudes about the curriculum, and helpful prevention strategies for the participants. The authors analyzed transcriptions independently and manually assigned codes to pertinent statements. Each researcher also independently developed a list of preliminary codes and met after coding transcripts to achieve consensus on the preliminary codes. Then, they independently coded the transcripts again with the aim of combining redundant codes and achieving greater specificity of codes when necessary. The researchers met to achieve consensus on these secondary codes. A third repetition of this process was used to further collapse related codes and achieve the final list of codes and themes. Every theme was a result of ideas that occurred repeatedly in each of the focus groups. Codes that were not supported were either dropped or labeled as anomalies. The coding procedure continued until codes reached the point of saturation in which further analysis resulted in no addition themes and the researchers agreed on the core themes (Strauss, 1987; Lofland & Lofland, 1995).

## Research Findings

Qualitative findings from the previous research (Holleran Steiker, Goldbach, Hopson, & Powell, under review) illustrates that participating in adaptation of the program may change knowledge, attitudes, beliefs and behaviors. During the research for this project, participants became emotional when describing the drug risks that their younger siblings and/or cousins face and their desire to help them avoid consequences they have experienced. For example, a young woman at an alternative school stated, with tears in her eyes, "I never thought about how my drug use might be affecting my cousin who looks up to me." The participant "experts" in the adaptation process recognized the consequences of substance use for both themselves and their younger peers through discussing their past decisions and future plans. Statements made by the students in the qualitative analyses of the adaptation process suggest both cognitive dissonance and shifts in their stage of change. Feedback included, "I never realized how much drugs I was using until I did this (prevention project) thing" and another student said, "So I do this [prevention project] by day, and go home to use at night – it is so messed up" (Holleran Steiker, Goldbach, Hopson, & Powell, under review). The dissonance created by this new positive identity coupled with their ongoing use of substances is a mechanism of change that must be studied further and systematically turned into a clinical trial for testing.

Table 1 illustrates the primary themes elicited from the qualitative analyses of themes. Salient reasons not to use drugs included the following: fear of becoming addicted, personal experience, and critical thinking. Almost 20% of comments received about reasons not to use substances were about family, and the protective nature of the family unit. Youth seemed to recognize and discuss the effects their friends had on them in choosing to use, often, directly calling it "peer pressure" or "influence". Overwhelmingly, youth cited "coping" as a reason to use, suggesting that using drugs or alcohol are a primary way to cope with the stressors of life which included family, school, friends and expectations.

The findings support the efficacy of cultural adaptation while maintaining the core curricular components. Involving youth in adaptations and design of prevention programs has been shown to benefit not only the youth receiving the curriculum, but those that participate in the adaptation process.

The findings of this study highlight the value of having youth tailor drug prevention curricula for older youth who already using drugs, for which universal abstinence messages are likely to be unsuccessful. Data indicate that participants tended to perceive evidence-based prevention programs as unrealistic for older youth. They felt that prevention programs tend to be more appropriate for younger youth and those who have not already begun using substances. In particular, youth across sites indicated that abstinence-based prevention messages do not resonate with their peers, most of whom have at least experimented with substances and many who use substances regularly. In the United States, incorporating a harm reduction message is often not feasible, since the activities in question constitute illegal behavior and parents resist non-abstinence based messaging. Yet, prevention program facilitators can allow for an open, non-judgmental discussion of the behaviors and experiences that are part of youths' everyday life, even if these include substance use. Youth emphasized the need for this content by asking for curriculum materials that reflect their life experience. Engaging youth in creation of their own videos through a structured adaptation process is a promising strategy for incorporating culturally relevant language and context into prevention program materials. In describing the adaptations they would make to prevention programs, they indicated that they value true testimonials of those who make a variety of choices including those who had wrestled with substance use and decided to abstain.

This project has several noteworthy limitations. All groups were held in one, large southwestern state. Therefore, findings may not generalize to other regions in the U.S. or other countries. Additionally, the use of the focus group methods has potential limitations. Youths may have felt unable to express opinions that diverged from those of the larger group, meaning differing ideas may have been missed. Lastly, the findings express those themes that could be found across the diverse sample of sites. This represents both a strength and limitation of the study, as findings represent the ideas of many unique youth groups, but lack specificity for one homogenous youth population (e.g., homeless youth).

## Implications for Social Work Practice

Despite the limitations of the study, these findings suggest that social work practitioners need to be responsive to the dynamic and complex nuances of youth who are at risk for and engaged in substance abuse. This study notes that the prevention needs of older adolescents differ from those of younger adolescents in important ways. This presents a challenge for practitioners because there are few substance abuse prevention programs that are tailored for older adolescents who have experimented with substances (Sussman, Dent, & Stacy, 2002; Sussman, Sun, McCuller, & Dent, 2003). While "Just Say No" (Reagan, 1986) messages may still be the appropriate intervention with young children, teen-aged youth who have witnessed or experienced their own substance use often find such abstinence messages irrelevant. They scoff at programs which overstate the consequences of use (i.e., "drugs will kill you") because they have witnessed use without impunity. In fact, the youth who use substances report that drugs and alcohol serve purposes in their lives – recreation, relaxation, stress relief, coping, etc. They note that some of their using peers continue to excel academically and creatively. However, when asked about their own perceptions and experiences regarding consequences of use, they have powerful cautionary stories including overdoses, relationship problems, accidents and abuses incurred under the influence, incarceration or death of family members or friends related to substance abuse, and suicide attempts.

Social workers who specialize in substance abuse often dichotomize prevention and treatment interventions – this article notes the significant overlap between the two areas. Youth can benefit from participating in prevention interventions and this may actually serve

as a form of treatment, especially for youth who do not yet meet criteria for or accept the need for clinical intervention.

Another implication of this study is the importance for social workers to raise their awareness of the value of dissonance as a change agent. Instinctively, social workers working with this population may feel the adolescent is lying or in denial if they speak about how "drugs are bad" or about consequences they see in others, rather than their own lives. Recognizing such discrepancies between an adolescent's "talk" and their "walk" can be reframed into opportunities for powerful discussion of their drug and alcohol related perceptions and experiences. Clinicians must not shy away from talking points, writing the adolescent off as unreceptive or resistant. In addition, Social workers do well to listen and reflect their adolescent clients' own motivating statements rather than sharing their own fears and utilizing scare tactics.

While it may seem to some social workers that details of substance abuse are hard to access, it is our experience that once an authentic and safe rapport is forged, there is no topic an adolescent substance abuser would rather talk about than drugs and alcohol. They are candid about the "pros and cons" of their substance use experiences. Adolescents in general, and substance abusing adolescents to a heightened degree, are sensitive to a lack of truth and genuineness. They have keen radar for lies, exaggerations, and manipulations. It is critical that social workers working with this population explore their biases and judgments so as not to be driven by stereotypes and personal opinions. It is not only acceptable for social workers to share their honest questions, ideas, and fears related to substance use, it is important for the clinical relationship to express such thoughts and curiosities. In the absence of judgment, such inquiries can prompt greater connection and client self actualization.

Developmental factors should be considered, such as teen-agers' tendency to value peer and youth input more than that of adults. For this reason, it is valuable for social workers to consider peer-led interventions. Also, due to their desire for independence and empowerment, they must come to their own conclusions rather than be told what to do by an adult. Information provision is not sufficient to change complex behavior choices. For example, an educator can give vast details about the harms of drugs to the mind and body to no avail, but one painful romantic break-up due to drug use might shift an adolescent into new willingness and behaviors. Ultimately, adolescents make their own decisions based on what is true for them and this can only be arrived at through real, valued relationships and honest discussions.

Social workers should not avoid opportunities to participate in applied research projects and program evaluations. There are many areas for exploration. Much research is still needed to determine the factors related to adolescent substance abuse and the shift from substance abuse to dependence. While great progress has been made in understanding effective prevention interventions for younger adolescents, there are gaps in the literature for older youth who are already abusing substances. Future research must aim to do the following: a) fill the gap between prevention and treatment, b) address the need for developmentally appropriate, engaging interventions for older youth; and c) specifically address the needs of high risk substance-abusing alternative school youth. This pilot study lays groundwork for future research in the application of dissonance-based interventions for substance abuse prevention with older adolescents.

In conclusion, perhaps the most important shift needed in substance abuse prevention and intervention with youth who are already engaged in such behaviors, is from a deficit, problem-based paradigm to a strengths-based, resilience model. Typically, adolescents in the

United States are not accustomed to being considered experts in anything (Karakowsky & McBey, 2001). It is recommended that social workers consider adolescents as experts in their own life experiences, which often means an expertise in substances (Holleran Steiker, 2008). By focusing on, valuing, and sharing such expertise, their powerful experiences may become the necessary vehicle for positive change.

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**TABLE 1**

Summary of Salient Qualitative Themes

| Theme 1: Reason to abstain | Response Frequency |
| --- | --- |
| *Total Comments* | *34* |
| 1. Fear of becoming addicted | 9 |
| 2. Family as a protective factor | 7 |
| 3. Critical Thinking | 6 |
| **Theme 2: Reason to use** | |
| *Total Comments* | *30* |
| 1. Family influence | 7 |
| 2. Peer pressure | 9 |
| 3. Coping Mechanism | 10 |
| **Theme 3: Usefulness of prevention programs** | |
| *Total Comments* | *15* |
| 1. Prevention programs based on personal experience | 9 |
| 2. Current prevention programs unrealistic | 4 |