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Defining Engagement in Adolescent Substance Abuse Treatment

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Abstract Youth engagement in substance use treatment is an important construct for research and practice, but it has been thinly and inconsistently defined in the literature. Most research has measured engagement by initiation, attendance, and retention in treatment. Because youth generally enter substance use treatment as a result of compliance with external requirements, defining engagement in this way might be insufficient. This qualitative participatory research study describes five focus groups with 31 adults working with youth in substance use treatment. Focus groups were designed and conducted by youth researchers in collaboration with university-based partners. We categorized participants' descriptions of engagement into five domains, identified as "CARES": Conduct, Attitudes, Relationships, Empowerment, and Social Context. These domains represent a comprehensive and ecologically-based definition of engagement that situates engagement in the context and trajectory of youth development, has clear implications for assertive clinical practice, and provides a foundation for developing an operationalized measure.

Keywords Engagement · Substance use treatment · Adolescents · Community based participatory research · Qualitative research

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Introduction

The use of alcohol or other substances in adolescence is associated with a broad range of negative outcomes in adulthood. Adolescents who use alcohol or other substances are at an increased risk as adults for alcohol and drug abuse and dependence (Grant and Dawson 1997, 1998; Sartor et al. 2011), injection drug use (Trenz et al. 2012), drug-related problems with work, relationships, and the justice system (Griffin et al. 2010), educational underachievement (Lynskey and Hall 2000), automobile accidents (Millstein and Irwin 1988), committing violence, particularly assault (Green et al. 2011), and long-term impaired or altered brain function and neurochemistry (Maldonado-Devincci et al. 2010). These and other troubling outcomes highlight the need to address adolescent substance use with a range of effective prevention, intervention, and treatment options.

Nevertheless, about half of publicly-funded substance use treatments for adolescents end unsuccessfully. In the United States in 2009 only 39 % of people aged 12–20 who were admitted to outpatient treatment had a successful discharge from that treatment. An additional 13 % were transferred to another treatment that often resulted in an unsuccessful discharge (SAMHSA 2012). The remaining 48 % were considered unsuccessful, either dropping out of treatment prematurely or being terminated by the service provider for lack of compliance. Another estimate cites average program completion rates of 40 % (Dembo et al. 2011). On the other hand, research supporting the relative effectiveness of manualized evidence-based treatments at successfully shepherding clients to treatment completion has accumulated, with higher completion rates ranging from 71 to 86 % (Curtis et al. 2009; Randall and Cunningham 2003). One possible contribution to the relative

success of these treatments is the emphasis they place on clinician activities to engage adolescent clients and their families in the treatment process, compared to treatment as usual.

Unfortunately, adolescent engagement in substance use treatment is an imprecise construct in the research literature (Staudt 2007), and currently does not feature the distinct operationalization necessary to facilitate measurement, theory building, and scientific discourse. Further, without clinical precision, the term "engagement" risks being a buzzword that fails to inform and guide clinical practice. The goal of the current study is to develop a clear and comprehensive definition of engagement in adolescent substance use, in order to build a foundation for the development of an operationalized measure. We do this through combining existing theory and research with therapists' experience and expertise, and interpreting these through the lens of youths who are researchers.

Many studies of adolescent substance use treatment that examine engagement either present no formal definition of engagement or fail to operationalize the construct in a manner consistent with their definition. The majority of studies we have located measure engagement by tracking treatment initiation, attendance, and/or retention (e.g. Byrnes et al. 2012; Dakof and Tejeda 2001; Dembo et al. 2011; Hogue and Liddle 2009; Lee et al. 2012; Robbins et al. 2006; Ruiz et al. 2011; Simmons et al. 2008; Szapocznik et al. 1988; Waldron et al. 2007). The Washington Circle measures of treatment initiation and engagement, which have been rapidly adopted by adult substance use services evaluations as the standard for measuring engagement in outpatient care, defines initiation as receiving an initial service at the start of a new treatment episode and then an additional service within 14 days. Engagement is defined as receiving two additional substance use service events within 30 days after initiation (Garnick et al. 2012). These measures are increasingly applied to adolescent substance use services (Lee et al. 2012; Ruiz et al. 2011). Similarly, child and family engagement in mental health treatment has also generally been measured as initiation, attendance, or retention (e.g. Ingoldsby 2010; McKay et al. 1998; Watt and Dadds 2007).

Defining engagement as initiation, attendance, and retention is straightforward, easily obtained, and, in some studies, has been related to better outcomes (Garnick et al. 2012). However, this definition may be incomplete, and may be methodologically problematic. Initiation and attendance for this population are usually driven through compliance with family, court, school, or employer demands, rather than intrinsic motivation (Chassin 2008; Waldron et al. 2007). Some studies have found weak or no relationships between treatment retention and subsequent substance use (Adams and Wallace 1994). For instance, in a study conducted in residential treatment, when comparing groups of adolescents who either completed treatment or experienced an "unplanned discharge" (i.e. they dropped out or were kicked out of treatment), youth who completed treatment did not have significantly better outcomes (Godley et al. 2001a, b). However, other studies have found positive relationships. In a recent study, engagement as defined by the Washington Circle measure was related to decreased self-reported substance use at 6-months post-treatment entry, but not other illegal activities (Garnick et al. 2012). More nuanced definitions of engagement might be likely to have stronger relationships with outcomes. For instance, in a study of parent behavioral skills training, a class of interventions that shares with substance use treatment typically low participation and retention rates (Katz et al. 2001; Stormshak et al. 2002), researchers found that a more complex measure of engagement that examined parents' level of interest, investment, support to others, and disclosure, was related to improved child and family outcomes, while a simple measure of attendance was not (Garvey et al. 2006). Hence, while defining engagement as initiation, attendance, and retention has value, building on this definition may add to our understanding of the process and correlates of engagement.

More nuanced theories and definitions of engagement have been proposed, though often not measured. In a review of the mental health literature, Staudt and colleagues concluded that engagement was composed of a *behavioral* component, which reflects completing the tasks necessary for treatment, and an *attitudinal* component, which reflects an emotional commitment to and belief in treatment (Staudt 2007; Staudt et al. 2012). Similarly, Joe, Simpson, and Broome wrote, "…the concept of treatment engagement still implies more than simply attending counseling sessions. Clinically, it refers to the degree to which a patient actively *participates* in the treatment process. This active participation suggests both an objective aspect representing patient compliance and session content, and a subjective aspect that reflects cognitive involvement and satisfaction with the process" (1999, p. 113). Another conceptually similar construct, treatment compliance, has been defined as "the extent to which a person's behavior not only coincides with medical or health advice but also reflect the person's commitment to his or her own care" (Wong et al. 2002).

Other, more expansive definitions have described engagement as an ongoing process of therapist and client (and sometimes community) interaction that awakens and maintains motivation for change (Dakof and Tejeda 2001; Gragg and Wilson 2011). In this way, engagement can be considered conceptually quite similar to therapeutic alliance (Faw et al. 2005; Marcus et al. 2011; Robbins et al. 2006) and therapeutic involvement (Hawke et al. 2005). Therapeutic alliance refers to positive working

relationships between clients and therapists, as opposed to negative or superficial relationships (Robbins et al. 2006). A classic conceptualization of the alliance posits three related elements: therapist-client bond, therapist-client agreement on goals of treatment, and therapist-client agreement on tasks to be completed for treatment to progress (Bordin 1979).

Therapeutic alliance is explicitly focused on the interaction and relationship between therapists and clients (and their families), rather than on behaviors exhibited solely by clients or therapists alone. Therapeutic involvement also shares many characteristics with the implied or described definitions of engagement: "Therapeutic involvement refers to clients' active engagement in the therapeutic process and acceptance of their own contributions to problem maintenance and resolution…. Another aspect of therapeutic involvement includes feeling a positive rapport with treatment staff…" (Hawke et al. 2005, p. 165). Similarly, other authors have described engagement as a therapeutic skill used to mobilize families and social networks to support clients in enrolling in and being motivated towards treatment (Landau et al. 2000).

This study aimed to develop a definition of engagement in adolescent substance use services by integrating established theory and research with an original study of substance use treatment providers (including clinicians and others in youth-serving roles). These data were viewed through the lens of a research team comprised of university-based academics, youth and young adults in researcher roles, and youth advocates. The goal was to provide a conceptual definition of youth engagement, concretely linked to provider activities intended to increase engagement.

This study expands on the work by Staudt et al. (2012), which was published after the current study had been completed. These authors conducted focus groups with community mental health therapists who served adults, children, and families about the barriers to and facilitators of engagement. However, the current study is focused specifically on gathering information from adults who were serving youth who were in substance use treatment and included participants in a broader pool of roles. Additionally, the current study expands on previous work by building a formal multidimensional definition of youth engagement.

This study focused on adults because the treatment providers who were studied had been trained specifically in youth engagement, and because of practical barriers to conducting youth focus groups including limited resources, a short timeline for study completion, and concerns about securing institutional review board approval for youth to conduct focus groups with other youth who were receiving substance use treatment.

Materials and Methods

This study is part of a larger project that used a participatory design consistent with Participatory Action Research (PAR; Minkler and Wallerstein 2002) and Community Based Participatory Research (CBPR; Israel et al. 2005). The study was conducted as a collaboration between university-based academic researchers and Youth N' Action (YNA), a youth-initiated, youth-led, and youth-run advocacy and support organization for adolescents and young adults with complex needs. PAR and CBPR have been underutilized as an approach to research, practice, and policy change in child and adolescent behavioral health (Jacquez et al. 2013; Pullmann 2009; Wong et al. 2010). The philosophy of PAR—to engage people who are impacted by research into the research process in a democratic way—overlaps well with the research question for this study. The PAR approach is rooted in the belief that valid knowledge is best generated not through a quixotic quest for objectivity, but rather through the intimate involvement of those who are closest to the issues (Chen et al. 2010). It is tied to a belief that social inclusion contributes to individual and community wellness (Prilleltensky 2010).

The study was requested and funded by a county government mental health and substance use division, which asked the University to study ways to increase youth engagement and retention in treatment in local services. The research team consisted of an adult "youth empowerment consultant," three "youth researchers" who are members of YNA, the director of YNA, and a Research Assistant Professor and a Research Coordinator from the University of Washington. The three youth researchers were hired at $14 per hour, and selected based on their ability to share their unique insight and personal experiences relevant to the study. These youth researchers were aged 17, 18, and 19. The Research Coordinator was a youth peer advocate who focuses on youth voice and inclusion. The team was grounded in experiences relevant to systems engaging youth in substance use treatment. The youth researchers and other members of the research team have received substance use or other behavioral health treatment, and three members of the team had multiple contacts with the juvenile justice system during their adolescence.

Initial team meetings focused on describing the overall goals of the project, discussing the various meanings of engagement, and describing the agencies who would participate. Later meetings focused on brainstorming specific research questions and specific focus group questions, and on training the youth researchers to conduct focus groups. To develop the questions, youth researchers conducted literature reviews on engagement, and then combined theories of youth engagement, best practices for engagement, evidence-based practices, and their own life experiences.

The Research Assistant Professor, Research Coordinator, and consultant trained the other members of the team on methods for conducting focus groups, including skills for appropriate responding, active listening, ethics, and the basics of focus group facilitation. The youth researchers received this training over a series of weekly meetings, telephone conference calls, and multiple practice sessions. During these trainings, the team continued to develop and solidify the focus group questions. Questions were modified, deleted, and added based on their experiences in previous focus groups. The focus group administration protocol was consistent with standard practice, beginning with broad "grand tour" questions and narrowing to more specific and sensitive questions (Rubin and Rubin 2005). From this broader protocol, responses to five questions were pertinent to the current study: (1) What is the agency's initial process of engaging youth?; (2) How do clinicians know when youth are effectively engaged—what does engagement look like?; (3) What are the barriers to and facilitators of engagement?; (4) How does the agency sustain youth engagement?; and, (5) Why do youth disengage from treatment?

Study Context

This study occurred in a large county in the US Pacific Northwest that had received two grants from the Substance Abuse and Mental Health Services Administration (SAMHSA). Both grants are intended to expand and improve the clinical workforce by training substance use service providers in the delivery of the Adolescent Community Reinforcement Approach (A-CRA) and Assertive Continuing Care (ACC), two evidence-based outpatient practices for treating youth with substance use problems. Both grants are highly similar except for the intended client population; one focuses on serving a general population of adolescent with outpatient substance use treatment needs, while the other grant focuses on adolescents who were in a Juvenile Drug Court.

Adolescent Community Reinforcement Approach is a recovery- and abstinence-oriented, behaviorally-focused approach to treatment (Garner et al. 2009; Godley et al. 2001a, b, 2009). It is based on the Community Reinforcement Approach, which has well established evidence of effectiveness on abstinence and recovery for substance-abusing adults (Meyers and Smith 1995). A-CRA is based on clinical efforts to modify the client's social environment to make sober behavior more reinforcing than substance use. This includes developing positive peer activities, positive family relationships, and improved life skills. A strong therapeutic alliance is foundational to A-CRA; hence, appropriate and effective engagement practices are essential to effectiveness and are a major aspect of clinical training. The length and course of treatment is flexible to meet the needs and treatment progress of the adolescent. Generally, treatment in A-CRA takes place over 12- to 14 weeks, with 10 individual sessions with the adolescent and 2 sessions with the caregiver and adolescent.

Assertive Continuing Care is an approach to providing follow-up services after substance use treatment is completed (Godley et al. 2006). By using the word "assertive," the developers mean that ACC places the responsibility for ensuring sessions occur in the hands of the clinician, encourages face-to-face sessions in natural settings that are convenient for the adolescent, and emphasize several non-traditional activities such as addressing barriers to treatment, advocacy for youth, and resource identification. The goal of ACC is to reinforce treatment success by removing barriers to participation in follow-up, especially transportation. Elements of ACC, such as the emphasis on community- or home-based services, are often incorporated into A-CRA. ACC is generally conducted for up to 6 months.

Therefore, A-CRA and ACC place a special emphasis on approaches to youth engagement and on placing the responsibility for engagement into the hands of the clinician. Because of this, these treatments serve as a particularly useful canvas for exploring the meaning of engagement to clinicians.

Participants and Procedure

The participants in this study (N = 31) were clinicians (n = 8), clinician/clinical supervisors (n = 4), clinical agency leadership (n = 4), other clinical agency staff such as screeners and trackers (n = 3), and a Juvenile Drug Court team (n = 12). Participants were 68 % white, 23 % African American, 6 % mixed race, and 3 % Asian. Participants were highly experienced; over 80 % reported having worked in their current field for over 7 years.

There were 5 focus groups conducted with staff from 6 substance use treatment agencies and the Juvenile Drug Court. Focus groups lasted for approximately 2 h, snacks or light meals were provided, and each participant was provided with a gift card worth $30 to a local department store. The participants were provided with informed consent, and the focus groups were audiotaped for transcription. All members of the research team took notes, asked questions, and used follow-up probes, and youth researchers took turns in the role of facilitator or note-taker. At the end, focus group participants completed a short satisfaction survey and were provided with an opportunity to anonymously provide additional written comments. After the focus groups were completed, each member of the research team fleshed out their notes prior to a team debriefing, which was followed by a time for

additional note-taking. Our qualitative data therefore consisted of four main sources: (1) notes taken during focus groups; (2) focus group transcripts of focus groups; (3) written comments by participants; and (4) notes taken during team debriefing sessions.

Analysis

We took a conventional content analysis (Hsieh and Shannon 2005) approach to developing codes. We triangulated viewpoints through including information from multiple team members, multiple participants, and multiple agencies. Our extensive debriefing sessions and reviews of data artifacts allowed us to process this data through the lens of our individual experiences and discuss, refine, and assign analytical codes. The research team met immediately after every focus group to debrief, and met at least once before every focus group to prepare for the next group. During these meetings, we discussed the findings, formulated possible themes, and built interpretive categories and codes. Each research team member read the transcripts in their entirety and took notes on possible codes. Our final meetings were focused on classifying and categorizing data from our four main sources (described above) into a coding structure. Then, using this coding structure, two members of the research team read the transcripts and notes taken during debriefing sessions line-by-line to assign codes to each section of text. New codes were added if data did not fit with an existing code, and old codes were merged if they better matched emerging themes.

Results

We categorized providers' definitions of engagement into five general dimensions which we defined as CARES—Conduct, Attitudes, Relationships, Empowerment, and Social Context. These are depicted in Table 1, along with their definition and examples of indicators. In the table and the results below, we cross-reference our results with existing research on engagement in order to compare, contrast, and situate our findings within the developing literature. This serves to highlight the contributions of this study, identify what existing indicators might not have generalized to the context of our study, and more thoroughly integrate our findings with the established literature. As described below, the domains of Empowerment and Social Context have not typically been integrated into measures of engagement.

Most commonly cited by participants was a *Conduct* dimension, which we define as "Observable client behaviors related to recovery and positive youth development." This definition is slightly different from Staudt's (2007), which is focused solely on tasks necessary to complete treatment. Our definition, based on our participants' input described below, is focused more broadly on recovery and change. Attendance in treatment sessions was the most commonly mentioned indicator of this dimension, consistent with the literature described above. However, several participants noted that attendance was often perfunctory, especially because substance use treatment is usually compulsory. Some participants argued that attendance was not necessarily a good indicator of treatment engagement, because sometimes youth did not attend services because they were engaged in more positive activities such as band, sports, or academic activities, or sometimes youth "needed a break" from treatment. Therefore, other behaviors that indicated more authentic engagement included active and unprompted participation in treatment, disclosure and speaking honestly "especially about the bad things," notifying the provider if they were going to be late or have to miss a session, checking-in, and making progress towards their treatment goals.

The dimension of client *Attitudes* was also considered an extremely important, though difficult to measure, aspect of engagement. Staudt defined the attitudinal aspect of engagement (for caregivers of at-risk children) as "The emotional investment in and commitment to treatment that follow from believing that it is worthwhile and beneficial" (2007, p. 185). This definition is a close fit with the responses we received. Engagement was described as ongoing, authentic personal engagement with the treatment process, where youth had buy-into treatment and motivation to change. Focus group participants said that attitudes could be judged by clients' accepting responsibility and accountability for their behaviors, expressing an emotional involvement in sessions, participating in treatment sessions in an "authentic" rather than forced manner, and non-verbal cues such as smiling, making eye contact, and using an open body posture

The third dimension of engagement that emerged during our focus groups was *Relationships*, defined as a shared understanding between clients and therapists, including bond (a sense of liking and trust), agreement on goals and tasks, collective action on tasks, and a sense that treatment is a collaboration between youth and clinician. This dimension is highly similar to published descriptions of the therapeutic alliance, working alliance, and therapeutic involvement described earlier. More than the previous two dimensions, relationships involve efforts on the part of both youth and clinicians. The Relationship dimension is composed of a sense of bond, goal agreement, and task agreement (Bordin 1979). Participants felt that youth were engaged when they clinicians and youth had a sense of rapport with each other, and were working together to accomplish tasks.

Table 1 CARES definition and indicators of engagement from focus groups and existing literature

Dimension	Definition	Examples of dimension emerging during focus groups	Examples of dimension from existing literature
Conduct	Observable client behaviors related to recovery and positive youth development	Attendance at treatment sessions Treatment compliance Active and unprompted participation in treatment Progress towards goals Disclosure Notifying provider if arriving late or missing a session	Attendance at treatment sessions Treatment compliance Initiation of treatment Completion of treatment Progress towards goals Completing homework and other displays of effort outside of sessions
Attitudes	"The emotional investment in and commitment to treatment that follows from believing that it is worthwhile and beneficial." (Staudt 2007, p. 185)	"Buy-in" or commitment to treatment/motivation to change Accepting responsibility for behaviors Emotional involvement in sessions "Authentic" participation Body language: smiling, eye contact, open body posture	"Buy-in" or commitment to treatment/motivation to change Emotional involvement in sessions
Relationships	Shared understanding between clients and therapists, including bond (a sense of liking and trust), agreement on goals and tasks, collective action on tasks, and a sense that treatment is a collaboration	Rapport Therapeutic Alliance/Working Alliance Asking for help Agreeing on goals and tasks Sense that clinicians that are open and welcoming Sense that clinicians respond to youth's goals and needs	Rapport Therapeutic Alliance/Working Alliance Therapeutic Involvement Agreeing on goals and tasks Collective action on task achievement Sense that treatment is a collaboration Sense of a cultural match between clinician, client, agency
Empowerment	Youth power in the treatment process, reflected by youth roles that transcend the traditional client role	Youth on clinic advisory boards or board of directors Youth-driven participatory action research	Youth peer support specialists Youth engagement liaisons Youth-driven community engagement efforts Youth-run media
Social context	Family-, social network-, and community-level capacity, willingness, and involvement in youth recovery and positive youth development efforts	Parent and family support of and/or participation in treatment Mobilized families and social networks Youth participation in positive activities outside of treatment Community stigma/support of treatment	Parent and family support of and/or participation in treatment Mobilized families and social networks Youth participation in positive activities outside of treatment Positive community connections and recovery networks Community stigma/support of treatment Cultural relevance of treatment to socio-cultural youth context Agency presence in the community—booths at community fairs, networking with community natural supports

Participants could identify engagement when youth and clinicians came to agreement about shared goals and tasks, when youth asked for help to accomplish their goals, and when youth and clinicians seemed to have a bond. Participants felt that a major part of engagement was clinicians engaging in activities to build this relationship. They did this by providing an open and welcoming environment, identifying the youth's goals and helping structure activities to meet those goals, encouraging fun and rewarding activities for youth, and reaching out to connect with youth who were not attending treatment. Finally, a few participants felt that relationships were easiest to build when there was a cultural match between clinician, client, and agency. They emphasized what they felt as the importance of clinicians and agencies who understood and could appropriately respond to multi-cultural needs, including youth culture.

There were two other dimensions of engagement that do not typically appear in the research literature on this topic,

but that emerged during this study. We define the dimension of *Empowerment* as youth power in the treatment process, reflected by youth roles that transcend the traditional client role. This definition is consistent with an established definition of empowerment as "a process by which people gain control over their lives, democratic participation in the life of the community, and a critical understanding of their environment" (Perkins and Zimmerman 1995, p. 570). Conceptualizing this dimension requires a shift in the way that treatment providers view the purpose of treatment, from work focused on making youth "problem free" to a paradigm focused on positive development and that views youth as resources in their own and others' treatment (Kim et al. 1998; Wong et al. 2010). This dimension may also consider "youth engagement" not as the treatment of individual clients, but as a collective youth force that is imbued throughout treatment.

Examples of empowerment in other settings have included youth clients or program graduates serving on boards of directors or advisory boards, youth-run media such as agency newsletters or websites, youth peer support specialists, youth involvement in reviewing new materials or treatment approaches, youth liaisons hired to re-engage clients, youth-led community outreach efforts, and youth-run activity groups. Though this was a topic that emerged for discussion during our focus groups, most participants were unable to provide any examples of youth involved in these types of roles through their agency or program. Participants at one agency said that they had a former client serving on their advisory board, and that an attempt to build a youth advisory committee had "fizzled out." As a result of the current study, another agency began to make use of trained youth peer support specialists to facilitate youth group meetings.

Finally, participants described the dimension of *Social Context* as a part of engagement. We define Social Context as "Family-, social network-, and community-level capacity, willingness, and involvement in treatment, recovery and youth development efforts." Many participants stated a belief that engagement in treatment hinged on a social context supportive of treatment, including parent, family, and peer-support of treatment attendance, goals, and activities. This belief fits with a study demonstrating that an intervention to support and mobilize parents to facilitate youth engagement in treatment was effective at spurring youth into treatment (Waldron et al. 2007). The Social Context dimension also includes engaging youth in positive youth development activities outside of treatment, such as academics, athletics, and extra-curricular activities. Participants said that one indicator of youth engagement in the treatment process was their initiation of these positive activities, not only to replace time previously spent using substances, but to stimulate their own emotional and intellectual growth and development.

The dimension of Social Context goes beyond a youth's immediate social connections. Participants believed that a major barrier to treatment was the level of community stigma around substance use and treatment. But, only a few participants specifically said that they worked on engagement and stigma reduction through community-level approaches such as having booths at community events, presenting to local church groups, and working with community agencies. A few participants in our focus group described working with community organizations to build employment and volunteer opportunities for the youth they served. By engaging in these opportunities, youth can center their life in the community, build competencies, and further their development, while acting as models to reduce stigmatized community perceptions of youth offenders and youth in substance use treatment (Nissen 2011).

Discussion

This paper presented a comprehensive, ecologically-based definition of youth engagement in substance use services, Conduct, Attitudes, Relationships, Empowerment, and Social Context (CARES), developed by synthesizing original research with existing literature and the participation of youth researchers. These findings are highly consistent with existing literature, but CARES combines at least three general threads of research in a heretofore undone manner. First, the CARES definition of engagement (specifically, the Conduct and Attitudes dimensions) fits with literature describing treatment engagement (and similar constructs) as consisting of a behavioral component and an attitudinal component (Joe et al. 1999; Staudt 2007; Wong et al. 2002). The behavioral domain describes the most frequent measures of engagement—treatment initiation, attendance, and retention. However, these domains also acknowledge the common criticisms of focusing solely on conduct, which is that behavior alone is easily faked, may be most strongly tied to compliance, and is therefore not a particularly good measure of authentic engagement. Therefore, initiation, attendance, and retention cannot distinguish between engagement and compliance. This is particularly true for adolescent substance use treatment, which is generally initiated as a result of external demands from schools, parents, or juvenile justice.

Authentic engagement, therefore, requires an attitude toward treatment that has at least partial emotional investment. This does not mean that all engaged clients always have a positive attitude toward treatment—remission and relapse cycles demonstrate that motivation can wax and wane, or that clients can be strongly ambivalent about the conflicting desires for substance use and for recovery. However, for youth to be authentically engaged in

treatment, there must be some attitudinal component. Past research has found, unsurprisingly, that lack of motivation is one of the most cited barriers to treatment by youth and families (Wisdom et al. 2010), and that youth beliefs about the relevance to and compatibility of treatment with their lives were correlated with their percentage of attendance at treatment sessions (Mensinger et al. 2006). In practice, the Conduct and Attitude domains suggest that engagement should be facilitated by working on both behavioral and emotional change. Therapists need to help facilitate the development of positive attitudes and buy-in towards treatment, possibly using Motivational Interviewing (Miller and Rollnick 2002), a client-centered approach to counseling that works to stimulate intrinsic motivation, or other techniques. Our CARES definition predicts that these approaches would be more likely to lead to authentic youth engagement than approaches that rely exclusively on behavioral compliance, such as solely using the threat of probation violations or other punishment to ensure treatment.

Second, the Relationship dimension of CARES incorporates the dyadic relationship between therapist and client into the definition of engagement. This dimension has strong parallels with literature on therapeutic alliance and therapeutic involvement, which have longstanding empirical evidence of being correlated with positive treatment outcomes (Faw et al. 2005; Marcus et al. 2011; Robbins et al. 2006) (Hawke et al. 2005). This dimension places responsibility on both therapist and client for ensuring engagement occurs, that the youth behaves in ways that are related to treatment and recovery, and that the youth has emotional buy-in with treatment goals.

In practice, this domain implies that goals should be developed and worked on mutually by therapists and youth. Sometimes, youth goals may seem positive but unrelated to treatment; however, using treatment to work towards these goals can help ensure buy-in and the motivational shifts illustrated in the Attitude domain, and can build on positive youth development in the Empowerment domain. The Relationship domain also emphasizes the active participation of the therapist in the engagement process. For instance, therapists and agencies may need to be assertive in identifying and supporting youth who are reluctant to participate in treatment, or they may need to locate youth who unexpectedly stop attending treatment and to provide incentives to motivate them to re-engage. Therapists (as well as reimbursing agencies) may also need to be flexible in terms where or how treatment is delivered, such as being willing to meet youth in their community, delivering treatment over the phone, and exploring the use of text messaging for communication. These approaches might help to build rapport and engagement by responding to youths' needs and culture.

Third, the CARES definition of engagement (specifically, the dimensions of Empowerment and Social Context) fits within a broader ecological framework that considers positive youth development, empowerment, and the social context of the youth's life as important aspects of engagement (Kim et al. 1998; Landau et al. 2000; Nissen 2011). These two domains represent treatment engagement in its broadest and most ultimate sense, which is to facilitate a positive future for youth who are struggling, and to situate healthy youth in a healthy community with positive activities and an authentic sense of opportunity. These individual and community development issues have not received enough focus in the existing research on engagement in substance use treatment.

This framework is in sync with self-determination theory, which posits that humans are innately channeled towards personal growth but that this force needs to be promoted by the right social-environmental facilitating factors and context, and this framework fits with the practice of Motivational Interviewing, which works to promote this self-determination force (Markland et al. 2005; Miller and Rollnick 2002). Engagement helps identify this spark of self-determination and, if done well, works to provide the context for it to grow. Engagement in treatment is therefore linked to the social factors that facilitate its effectiveness, and embedded in the context and historical trajectory of a youth's life. At an even deeper level, the Empowerment and Social Context dimensions echo the efforts of the Reclaiming Futures initiative to build community recovery networks where youth have opportunities to have meaningful connections and positive contributions (Nissen 2011). One study has found that community-level factors, including county median income and rates of juveniles in detention, are related to youth retention in substance use services (Jones et al. 2007). In this sense, the social context of engagement emphasizes a transformation of the environment in which youth live in order to support youth to transform their lives.

Empowerment and Social Context suggest several activities for clinical practice. Most obviously, in order to improve treatment engagement, therapists can focus on engaging family members, peers, and other important figures in the youth's life into the goals of treatment. Family support of treatment, or the lack thereof, was one of the most frequently mentioned supports of and barriers to treatment engagement. Studies have demonstrated that mobilizing and engaging families results in greater treatment initiation and attendance (Landau et al. 2000; Waldron et al. 2007). Less obvious for engagement is the opportunity for treatment providers to support empowerment of youth beyond the traditional client role, and to work with the community to develop community connections and recovery networks. Providers could work to support youth in roles such as providing services to other youth as peer support specialists or engagement liaisons,

serving as advisors to the mental health agencies, creating their own media about treatment and recovery, or even serving as researchers on a participatory research project about substance use service delivery (Prilleltensky 2010). Additionally, engagement can be enhanced when providers and youth work with their community to build networks through identifying or creating volunteer, recreational, and employment opportunities for youth in recovery.

Commentary on Youth Participatory Research

Five phases of community based research have been outlined by Israel et al. (2005), including (1) partnership formation and maintenance, (2) community assessment and diagnosis, (3) definition of the issue, (4) documentation and evaluation, and (5) feedback, interpretation, dissemination, and application of the results. In many participatory research projects, authentic youth involvement in each of these phases is bounded by pragmatic, political, mandated, or other constraints (Ozer et al. 2013). In our study, youth researchers were involved in Phases 3, 4, and 5, but completely constrained from participating in Phase 2, and experienced some constraints in other phases. As mentioned above, the funder specified the overall goal of the research based on their appraisal of the community needs; therefore, youth did not participate in Phase 2 (community assessment and diagnosis), and youth involvement in Phase 3 (defining the issue) was majorly constrained. However, the youth still made significant contributions in Phase 3 by adding research questions that shifted the focus away from a myopically academic view, and in particular, directly led the research to the expansion of engagement to include the dimensions of Empowerment and Social Context. Youth had a major role in Phase 4 by conducting the research and analyzing the data, and in Phase 5 by disseminating the information, including presenting their findings to selected participating agencies, a grand rounds seminar at the University, and at a national conference. Even so, constraints on dissemination included budget issues that prevented the entire team from participating in these presentations, and a perception that they were not taken seriously by all attendees at presentations. Additionally, youth participation in writing and disseminating professional reports and this manuscript was constrained by pragmatic issues related to their lack of experience with academic forms of communication. Finally, one of the participating treatment agencies facilitated youth involvement in acting on the results and recommendations of our research by working with YNA to develop and implement a youth peer support program. However, the other agencies did not promote or act on these recommendations, which constrained the youth from participating in implementing their findings.

As other researchers have noted, participatory research is not easy (Jacquez et al. 2013; Israel et al. 2005; Minkler and Wallerstein 2002; Ozer et al. 2013). We experienced many of the same challenges as has been reported elsewhere in terms of long timelines, attempting to balance shared power with research expertise, working with youth who are still developing skills such as responding to deadlines and consistently arriving to work on time, difficulties with transportation, and youth lacking regular access to computers. Most of these challenges were alleviated by the incredible dedication of the youth empowerment consultant, the director of YNA, and the Research Coordinator, all of whom invested an inordinate amount of time to coordinate schedules, provide transportation, structure group process, rehearse and practice focus group facilitation, coach and provide mentorship about dress and demeanor, and generally support the youth without exerting undue power over their decision making.

Limitations

Several limitations are directly related to the study's strengths. This study was conducted with a select group of providers and adults working on youth substance use treatment. Members of our focus group had been trained on and were practicing substance use treatment approaches that place a major emphasis on active engagement of youth. Due to this training and emphasis, our participants may be more knowledgeable and thoughtful about youth engagement than "average" substance use treatment providers. As a result, the generalizability of our model may be limited; on the other hand, this limitation is mitigated because we likely obtained a more thoughtful, thorough, and complex understanding of engagement. Additionally, the study did not include focus groups with youth. This was due to feasibility issues in terms of resources for the study, our funding timeline, and the additional difficulties associated with identifying and interviewing a sensitive group (minors in substance use treatment). An additional limitation is that the exploratory, qualitative nature of the study precludes testing of the definition through an operationalized measure at this time. Despite these limitations, as described above, our findings are highly consistent with established research and theory about engagement in treatment. Most of the individual dimensions of engagement are well-established. It is the combination of these dimensions into a coherent whole that is unique and that requires further exploration and testing.

Future Directions

The CARES definition is more expansive view of engagement than previously described. CARES nests

engagement within an ecological context, and it inherently encourages clinicians and others to work on multiple levels in order to increase engagement, improve treatment outcomes, and support positive youth development. Future research should focus on operationalizing a measure of youth engagement to be used with youth in treatment that is based on this definition and is actionable, measurable, and associated with outcomes. A measure such as this would be extremely valuable in order to track engagement over time, to flag youth who may be at risk of not engaging or disengaging, and to identify the specific domains that a clinician or agency should address in order to improve engagement. Factor analyses and other psychometric analyses with this measure can help determine the validity of this operationalization, which would make a strong contribution to the development of a theory of treatment engagement and its role in treatment and positive youth development. Future research should also work to compare and contrast the constructs, parameters, and contexts of engagement in substance use treatment as compared to other types of treatment, such as mental health, chronic illness, or physical therapy, and for different populations such as adults.

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