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Changes in treatment engagement of youths and families with complex needs

Kimberly D. Becker [a,*], Laurel J. Kiser [b], Steven R. Herr [b], Laura M. Stapleton [c], Crystal L. Barksdale [d], Sara Buckingham [e]

[a] University of Maryland School of Medicine, Department of Psychiatry, 737 W. Lombard Street, 4th floor, Baltimore, MD 21201, United States
[b] University of Maryland School of Medicine, Department of Psychiatry, 737 W. Lombard Street, 5th floor, Baltimore, MD 21201, United States
[c] University of Maryland, Department of Human Development and Quantitative Methodology, 1230C Benjamin Building, College Park, MD 20742, United States
[d] SRA International, Inc., 6003 Executive Blvd., Suite 400, Rockville, MD 20852, United States
[e] University of Maryland Baltimore County, Department of Psychology, 1000 Hilltop Circle, Room 312, Baltimore, MD 21250, United States

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ABSTRACT

This study examined changes in treatment engagement of 437 youths and their caregivers receiving mental health services in the United States. The youth sample had an average age of 12.03 years ($SD = 2.98$). Nearly two-thirds (64.1%) of the youth sample was male and approximately the same proportion was Caucasian. Youths were diagnosed primarily with externalizing (50.1%) and internalizing (46.0%) disorders. Most youths (86%) received services from intensive settings (i.e., behavioral health rehabilitation, treatment foster care, family-based services) that provide care beyond the scope of services provided to youths receiving services in traditional outpatient settings. Using KIDnet, an electronic outcomes management system, youths and their caregivers reported on three domains of treatment engagement: therapeutic alliance, satisfaction with services, and treatment participation at each 90-day reporting cycle until treatment termination. Youths and caregivers receiving services from high intensity treatment settings reported significantly lower initial engagement compared to youths and caregivers receiving less intensive outpatient services. Regardless of setting, treatment engagement reported by youths and caregivers increased over time. These promising findings suggest that families receiving intensive treatment develop connections to service providers and hold positive perceptions of services over time. These results provide the foundation for future research to examine the practices that are associated with changes in treatment engagement over time.

1 . Introduction

Estimates suggest that 20–40% of youths have a psychiatric disorder (Costello, Copeland, & Angold, 2011). Despite an apparent need for mental health services, national survey data indicate that as many as 50% of youths in need do not enroll in mental health services (Merikangas et al., 2010). In outpatient as well as residential settings, approximately 50% of youths terminate services early (Pellerin, Costa, Weems, & Dalton, 2010; Vourakis, 2005); therefore, the study of the engagement of youths and families in services is a worthy endeavor.

Engagement is typically conceptualized as a multifaceted construct that reflects attitudes and behaviors (Ajzen, 1991; Morrissey-Kane & Prinz, 1999; Staudt, 2007). Attitudinal engagement can be influenced by many factors, such as therapeutic alliance, treatment satisfaction, beliefs of treatment efficacy, stressors, and external barriers to treatment, to name a few. Attitudinal engagement, in turn, is related to client behavioral engagement, as indicated by attendance, participation in treatment sessions, and adherence. Engagement is not static, but is a dynamic process that occurs over the course of treatment (Ellis, Lindsey, Barker, Boxmeyer, & Lochman, 2013; Staudt, 2007). Additionally, engagement ebbs and flows over time due to many of the same factors that influence engagement at the outset of treatment (Nock & Kazdin, 2005). Not surprisingly, initial treatment engagement often predicts later engagement (Chu & Kendall, 2004; Ellis et al., 2013). Moreover, the extent to which a child is engaged in treatment predicts a caregiver's attendance at treatment (Ellis et al., 2013).

Although theories clearly specify engagement as a multifaceted construct that fluctuates over the course of treatment, the body of literature examining changes in engagement and predictors of engagement is relatively small. Learning more about how treatment engagement changes over time, as well as the factors that predict changes in engagement, could inform continued development and testing of interventions to promote attitudinal and behavioral engagement. The purpose of this paper was to examine longitudinal patterns of treatment engagement

* Corresponding author.
E-mail addresses: kbecker@psych.umaryland.edu (K.D. Becker), lkiser@psych.umaryland.edu (L.J. Kiser), sherr@psych.umaryland.edu (S.R. Herr), lstaplet@umd.edu (L.M. Stapleton), Crystal_Barksdale@sra.com (C.L. Barksdale), sara.l.buckingham@umbc.edu (S. Buckingham).

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in a large sample of youths and their caregivers receiving mental health services, who reported every three months on therapeutic alliance, satisfaction with services, and treatment participation.

Of note, "treatment engagement" is a term with a myriad of meanings that lacks clear operationalization across studies. The current study included a composite engagement construct reflecting three facets of engagement: therapeutic alliance, satisfaction, and treatment participation. In the paragraphs that follow, the rationale for inclusion of each component in the composite representation of treatment engagement is presented.

1.1. Therapeutic alliance

Although variations in the conceptualization of therapeutic alliance exist (see Elvins & Green, 2008 for a review of therapeutic alliance), alliance is considered a multifaceted construct that includes the affective relationship between the client and therapist as well as the client's collaboration with therapy activities (Bordin, 1994; Hougaard, 1994; Shirk & Saiz, 1992). Of the various domains of treatment engagement, therapeutic alliance is the most widely studied. Its importance to the therapeutic process is underscored by meta-analytic evidence of the association between therapeutic alliance on the one hand, and treatment attrition or outcome on the other (Karver, Handelsman, Fields, & Bickman, 2006; Shirk & Karver, 2003), although a more recent meta-analysis (i.e., McLeod, 2011) yielded a smaller effect size that was not significant.

Research indicates that the therapeutic alliance is a dynamic, rather than static, construct (Chu & Kendall, 2004; Robbins et al., 2006). The course of the therapeutic alliance is particularly important to examine because change in alliance, rather than initial alliance, is a better predictor of treatment attrition (Robbins et al., 2006) and outcomes (Chu & Kendall, 2004; Hogue, Dauber, Stambaugh, Cecero, & Liddle, 2006).

Alliance within the context of children's mental health services involves the development of therapeutic relationships between the therapist and both the youth and his/her caregiver(s) (Bickman et al., 2004; Shirk & Karver, 2003), even when the primary treatment modality is not family-based. Alliance with the caregiver is important to treatment success because youths do not typically self-refer to treatment and often rely on a caregiver to approve care decisions, provide transport to and from appointments, and follow up with ancillary support such as obtaining medication from a pharmacy. Interestingly, research suggests that the correlation between reports from youths and caregivers about the therapeutic alliance is low (Robbins, Turner, Alexander, & Perez, 2003; Shelef, Diamond, Diamond, & Liddle, 2005) and that informant discrepancies related to perceptions of the therapeutic alliance are meaningful. In one study, for example, the divergence between adolescent and caregiver report of alliance predicted treatment dropout (Robbins et al., 2003).

Given the importance of the therapeutic alliance to treatment participation and progress, the dynamic nature of the alliance, and the potential divergence between reports of alliance from youths and caregivers, it is not surprising that there is growing interest in the factors associated with positive therapeutic alliance. However, the literature on predictors of alliance in children's mental health treatment is sparse at this time. In general, there is little support for the association between demographic factors such as a youth's race, age, or gender and youth-rated alliance (e.g., Creed & Kendall, 2005; Garner, Godley, & Funk, 2008). Intensity of services has not been formally examined as a predictor of alliance, although there is evidence that satisfactory alliance can be achieved in intensive service settings (i.e., partial hospitalization and wilderness camp; Bickman et al., 2004).

In sum, it appears that the therapeutic alliance is an important domain of treatment engagement because it bears at least a modest association to treatment attendance and outcome. Moreover, it appears that the therapeutic alliance is dynamic over time and that perceptions of the alliance vary by informant, thereby underscoring the need to examine change over time and across youth and caregiver reports.

1.2. Satisfaction

The literature on satisfaction with children's mental health services is growing yet faces conceptual and measurement challenges that are common in nascent literatures (Biering, 2010). The measurement of consumer satisfaction is steadily increasing in children's mental health services for reasons of accountability, ease of administration, and the face validity of measures (Athay & Bickman, 2012). Satisfaction might be examined across one or more domains: organization of services (e.g., accessibility, cost of services), therapeutic relationship, and treatment outcome (Biering, 2010), although often these domains are not clearly specified but are discussed under the umbrella term as "satisfaction."

There is mixed evidence for the relationship between satisfaction and treatment outcome, such that some studies have shown a small association (Garland, Haine, & Boxmeyer, 2007; Lambert, Salzer, & Bickman, 1998; Turchik, Karpenko, Ogles, Demireva, & Probst, 2010) whereas others have not (e.g., Noser & Bickman, 2000; Shapiro, Welker, & Jacobson, 1997). It is plausible that satisfaction might change over the course of treatment, perhaps varying according to fluctuations in the therapeutic alliance or treatment progress. To our knowledge, there exist no studies of changes in satisfaction over time within the context of youth mental health services. With regard to informant, studies that measure satisfaction have found that caregivers and youths report positive satisfaction with services (e.g., Garland et al., 2007; Turchik et al., 2010), yet caregiver and youth reports often have only a small correlation with one another (Athay & Bickman, 2012; Garland et al., 2007; Godley, Fielder, & Funk, 1998; Turchik et al., 2010). In the Garland et al. (2007) study, clinical improvement was associated with caregiver satisfaction but not youth satisfaction; thus, it may be important to consider the perspectives of youths as well as caregivers to fully understand treatment satisfaction on the part of the child or adolescent consumer.

Examination of the association between client demographic factors and satisfaction have yielded few robust predictors of satisfaction (Barber, Tischler, & Healy, 2006; Garland, Aarons, Hawley, & Hough, 2003; Garland et al., 2007; Martin, Garske, & Davis, 2000). In one study, Caucasian youths reported greater satisfaction than non-Caucasian youths (Garland et al., 2007) and males reported greater satisfaction than females in another study (Shapiro et al., 1997). Two studies suggest associations between satisfaction and age, with younger youths reporting greater satisfaction than their counterparts (Shapiro et al., 1997; Stüntzner-Gibson, Koren, & DeChillo, 1995), yet a separate study found that older youths reported greater satisfaction than younger youths (Turchik et al., 2010).

Findings regarding the association between clinical characteristics (e.g., symptom severity, diagnosis) and satisfaction are also mixed such that some studies have found an inverse relationship between satisfaction and symptom severity (e.g., Barber et al., 2006; Garland, Aarons, Saltzman, & Kruse, 2000; Godley et al., 1998; Noser & Bickman, 2000), whereas others have found no relationship (Garland et al., 2007; Shapiro et al., 1997; Stüntzner-Gibson et al., 1995). Turchik et al. (2010) found evidence for the association between clinical diagnosis and satisfaction such that youths with disruptive behavior disorders reported less satisfaction than youths with ADHD, adjustment, anxiety, bipolar, major depression, mood disorders, and psychotic disorders. Overall, the literature regarding satisfaction with children's mental health services is relatively small and much remains to be studied regarding the course of satisfaction over time and the factors that promote positive reports of satisfaction with services.

1.3. Treatment participation

Treatment participation refers to an individual's involvement in treatment sessions. Participation is one component of adherence, in