Empirical Research

The Functional Idiographic Assessment Template-Questionnaire (FIAT-Q): Initial psychometric properties

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ABSTRACT

The evidence based assessment (EBA) movement stresses the importance of psychological measures with strong psychometric properties and clinical utility. The Functional Idiographic Assessment Template system (FIAT; Callaghan, 2006) is a functional analytic behavioral approach to the assessment of interpersonal functioning for use with therapies like Functional Analytic Psychotherapy (FAP; Kohlenberg & Tsai, 1991). While research has begun to demonstrate the clinical utility of the FIAT, its psychometric properties have not been explored. The present study examines the Functional Idiographic Assessment Template-Questionnaire (FIAT-Q), a self-report measure contained in the FIAT. Two different approaches are used to explore the psychometric properties and structure of the FIAT-Q, and test–retest reliability is examined. These methods are discussed along with the use of the FIAT-Q as an alternative to nosological assessment of client behaviors.

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1. Introduction

The evidence based assessment (EBA) movement is a similar movement to the empirically supported treatment (EST) and evidence based practice (EBP) movements in clinical psychology. EBA refers to the use of assessment methods and measures that have strong psychometric properties (i.e., reliability, validity) as well as clinical utility (Hunsley & Mash, 2005; 2007). Clinical utility includes a number of factors such as cost effectiveness of an assessment and the contribution it makes to accurate diagnosis and clinical decision-making (Hunsley & Mash, 2005, 2007). A very important component of the clinical utility of an assessment is its treatment utility: the contribution an assessment makes to beneficial treatment outcomes (Hayes, Nelson-Gray, & Jarrett, 1987, 1989; Nelson-Gray, 2003).

Hayes and Follette (1992) suggest that a functional analytic assessment approach, as originally outlined by Kanfer and Saslow (1969), can provide a useful framework for the development of evidence based assessments. Broadly, a functional approach to assessment is defined by the "identification of important, controllable, causal

functional relationships applicable to a specified set of target behaviors for an individual client" (Haynes & O'Brien, 1990, p. 654). A functional behavioral approach to clinical assessment fulfills the call for empirically based assessments because it has its foundations in the extensive experimental analysis of behavior (EAB) and applied behavior analysis (ABA) literatures. The treatment utility of this type of approach has been previously demonstrated in different populations (e.g., self-injurious behavior in developmental disability population, Iwata, Dorsey, Slifer, Bauman, & Richman, 1982, reprinted Iwata, Dorsey, Slifer, Bauman & Richman, 1994; Iwata, Pace, Cowdery, & Miltenberger, 1994).

1.1. Functional assessment and psychotherapy

Functional behavioral assessment has also been used in traditional adult psychotherapy settings. As noted by Hayes and Follette (1992), functional behavioral approaches to assessment have not gained widespread usage or popularity. This is primarily because of difficulties in manualizing them for the purposes of empirical research. In a behavioral analysis, each client is viewed as an individual who has unique factors controlling his or her behavior. As a result, in adult outpatient populations, functional analysis typically requires creative application of numerous basic principles as part of an iterative process (Hayes & Follette, 1992). This causes two major difficulties for manualization. The first difficulty is that therapists are required to attend to and analyze the function of

behavior rather than its topography. This is often counterintuitive to therapists who have been trained to assess for signs and symptoms within the DSM approach. It is also more difficult to operationalize; it is much easier to describe how to track the number of times a client cried during a session than it is to demonstrate how to analyze the function of each instance of crying (e.g., avoidance, creating intimacy) and how that behavior relates to other behaviors of different topographies with the same function.

The behavioral approach to assessment is also difficult to manualize because it is intimately connected to treatment. It uses assessment as a method for generating hypotheses that inform treatment strategies; the validity of assessment-generated hypotheses is then tested by the outcome of the treatment they suggest. Therapy is approached as a continuous process of generating and testing hypotheses about how to effect client improvements. Thus, successful treatments are reflective of a principle of equifinality: while similar final results may be achieved, therapists may follow different paths to obtain them (Darrow, Dalto, & Follette, 2012). For example, consider a depressed client who has assertion skills deficits and is socially inactive. Based on differing initial impressions, one therapist might begin therapy with assertion skills training while another might start with working to increase the client's frequency of interacting with friends. It is highly likely that both therapists would eventually target the client's assertion skills and level of social activity, ultimately leading to dissipation of the client's depressive behaviors. This is obviously a beneficial result for the client and demonstrates the utility of the assessment (and treatment) strategy. Unfortunately, this functional approach does not aid in the identification of rules that would allow for ready replication of the method (e.g., "always assess assertion skills first").

1.2. The FIAT system and functional analytic psychotherapy

Despite these difficulties, it is important to examine ways of streamlining and standardizing this process in order for functional analysis to be more widely adopted. One such effort is embodied by the Functional Idiographic Assessment Template system (FIAT; Callaghan, 2006). The FIAT system was designed for use in research and clinical applications of Functional Analytic Psychotherapy (FAP; Kohlenberg & Tsai, 1991; Tsai et al., 2008), a behavior analytic psychotherapy targeting client interpersonal repertoires. It was initially developed in response to a growing need for consistent language about the variety of different interpersonal repertoires addressed in FAP. FAP is a contemporary behavioral intervention that uses both Skinnerian operant principles of shaping behavior with social reinforcement and contemporary contextual science analyses of language to understand how to effectively create clinical change in the context of the therapeutic relationship (see for example, Callaghan, Naugle, & Follette, 1996; Follette, Naugle, & Callaghan, 1996). Contingent responding to client interpersonal behaviors is the hypothesized mechanism of change in FAP, so the idiographic functional behavioral assessment of each client's interpersonal repertoires is essential for therapeutic success (Follette et al., 1996). The FIAT provides a tool for guiding such an assessment.

The FIAT system has two specific features consistent with the EBA requirement of clinical utility. First, it is a functional analytic assessment tool that aids in the identification of variables influencing client behavior using the traditional three-term contingency (antecedent, behavior, consequence). While it does not employ the systematic manipulation of potential controlling variables found in traditional behavioral functional analytic methods, it utilizes a descriptive method that can have an equivalent utility (e.g., Lerman & Iwata, 1993). As a result, the FIAT allows therapists to understand client behavior from a functional behavioral perspective and design appropriate interventions based on empirically-derived learning principles. Second, the FIAT is

an idiographic assessment system (see for example, Haynes & O'Brien, 2000) that promotes the analysis of the behavior of each client as an individual. The product of the FIAT is a dynamic, client-specific case formulation that captures the current functioning of an individual client while allowing for revision as the client's behavior changes. Its utility as an assessment has been supported in FAP process and outcome research (e.g., Callaghan, Summers, & Weidman, 2003; Kanter et al., 2006) and other clinical settings. However, as a system developed within a functional analytic behavioral framework, the FIAT is subject to similar barriers of its empirical validation as an EBA, and its psychometric properties have yet to be validated.

1.3. The FIAT-Questionnaire

The Functional Idiographic Assessment Template-Questionnaire (FIAT-Q) was derived to help make the assessment process more efficient by trying to gather a standardized set of information directly from clients. The FIAT-Q is a client self-report measure that reflects the same structure as the FIAT. It allows for standardized tracking of problems and improvements in interpersonal functioning across these areas of functioning. There are five important classes of behavior detailed in the FIAT system and FIAT-Q: assertion of needs and values (Class A); bidirectional communication or giving and receiving feedback from others (Class B); responding to conflict in social interactions (Class C); disclosure or interpersonal intimacy (Class D); and the experience and expression of emotions (Class E). If client responses on the FIAT-Q help identify important therapeutic targets (i.e., functional classes of behavior related to client's presenting problems), its use could greatly enhance the ease of implementing a functional analysis in order to build an idiographic case conceptualization. Ultimately, the validity of this measure will depend on how useful it is in guiding treatment. However, it is important to examine the psychometric properties of this measure. Results from two studies that examined preliminary data regarding the psychometric properties of the Functional Idiographic Assessment Template-Questionnaire are presented.

2. Method

Study 1 presents two statistical methods of exploring the latent structure of the FIAT-Q along with evaluating other psychometric properties for the same data set gathered using the same methods. Part A presents the confirmatory factor analyses testing the model used to develop the FIAT-Q. Part B provides analyses of the underlying structure of the FIAT-Q and yields a short form of the FIAT-Q (FIAT-Q-SF) with 6 factors and 32 items. Study 2 presents the test–retest reliability data for the original, longer form and the new short form.

2.1. Participants

Participants were recruited through a western university's undergraduate research pool. Participants were required to be at least 18 years, and there were no other exclusionary criteria. Four hundred fifty-nine students were enrolled in the study. Of the total participants, 36% ($n = 167$) were male. The mean age of the participants was 20.9 (SD = 5.6), and they represented an ethnically diverse sample (see Table 1).

2.2. Materials

Following is a list of measures the participants completed. Table 2 summarizes the expected direction of the correlations between the FIAT-Q and the measures used to examine convergent and divergent validity.