

RESEARCH REPORTS FROM IBR

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Client Needs and Progress Monitoring

By *Dwayne Simpson and Kevin Knight*

Automated data capture (ADC)

techniques have growing importance for clinical applications of assessment tools that focus on client needs and functioning in relation to services. Without such information being available in a timely and user-friendly form, frontline clinicians are not optimally positioned to plan and deliver services that meet “evidence-based” criteria.

Several optical reader or on-line internet applications for TCU assessment forms have been considered in recent years, but many require technical and financial resources beyond the practical reach of our treatment-provider collaborators. Security-related restrictions (such as using offender internet-based assessments in correctional settings) also present special challenges.

Scantron© has a history of educational and related applications using a wide range of equipment and software supports which offer potential solutions. By adding customized Excel-based scoring and feedback templates, we have developed a feasible and low-cost “turn-key” system that meets these requirements.

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Practical features requirements for ADC applications call for (1) flexible options in choosing a set of efficient and effective forms that meet practical needs, (2) affordable equipment for reading and scoring of data, (3) low cost and easy access to forms, and (4) on-site provision of rapid and user-friendly feedback for making time-sensitive clinical applications.

Single-page client assessments appear to be optimal for these applications, so selected TCU Forms are being reformatted. These new “[TCU ADC Forms](#)” are described below, along with scoring and software user manuals. The forms offered as downloads from our Web site are samples. However, like our larger inventory of other TCU Forms available, these can be downloaded and used without cost in non-profit applications for direct administration and hand scoring.

Several of our most popular TCU Forms have been adapted for use in single-page optical scanning applications. These have been “reconfigured” by reorganizing items into separate sub-domains. A few scales found in previous research to have marginal applications have been eliminated, and replacement items have been added to some forms (e.g., a social desirability response scale).

The result is a more streamlined and focused series of one-page forms, enhanced with an automated

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scoring and feedback protocol for making normative clinical interpretations of results. Preliminary evidence on the psychometrics of these modified single-page assessment formats indicates they are psychometrically consistent with earlier “original” aggregated versions of the forms, but further research is still in progress. New TCU ADC Forms also are being developed in response to the needs of our field collaborators and on-going research. In most cases, these represent abbreviations or subsections being adapted from previously studied TCU assessments.

Optional Formats are available for these assessments, designed to serve users at different levels of optical scanning and automated scoring technology. The simplest alternative is to download PDF versions, print copies of single-page forms of interest on legal-size pages, and use them for direct administration and scoring by hand (as specified in their respective scoring guides). This also is a reasonable “first step” for new users who want to become better acquainted with applications and potential benefits of these assessments.

The assessments

The **TCU ADC Drug Screen II** (TCU ADC DSII) is self-administered and serves to quickly identify individuals with a history of heavy drug use or dependency (based on the DSM and the NIMH Diagnostic Interview Schedule). It is particularly useful (and widely used) as a tool in criminal justice settings, for identifying offenders eligible for treatment as an alternative to regular incarceration.

Client Evaluation of Self and Treatment is a “family” of **4 self-report assessments** for monitoring client needs and progress. They include treatment motivation, psychosocial functioning, and clinical engagement scales designed to be re-administered throughout treatment to help inform planning of services and gauge client changes over time. (Also see [TCU Manuals](#), especially for planning care and monitoring progress in relation to therapeutic interventions.)

- **Treatment Needs and Motivation (TCU ADC MotForm)** includes 36 items from 5 scales representing Problem Recognition, Desire for Help, Treatment

TCU ADC Forms Currently Available on IBR Web

TCU ADC DRUG SCREEN II (Drug Use in Past Year)

TCU ADC MotFORM (Treatment Needs and Motivation)

Problem Recognition, Desire for Help, Treatment Readiness, Treatment Needs Index, & Pressures for Treatment Index

TCU ADC PsyFORM (Psychological Functioning)

Depression, Anxiety, Self-Esteem, Decision Making, & Expectancy

TCU ADC SocFORM (Social Functioning)

Hostility, Risk-Taking, Social Support, & Social Desirability

TCU ADC EngFORM (Treatment Engagement)

Treatment Participation, Treatment Satisfaction, Counseling Rapport, & Peer Support

TCU ADC CTSFORM (Criminal Thinking)

Entitlement, Justification, Power Orientation, Cold Heartedness, Criminal Rationalization, & Personal Irresponsibility

Readiness, Treatment Needs Index, and Pressures for Treatment Index. It is used mainly for intake and early treatment phases.

• Psychological Functioning (TCU ADC PsyForm)

includes 33 items from 5 scales representing Depression, Anxiety, Self-Esteem, Decision Making, and Expectancy.

• Social Functioning (TCU ADC SocForm)

includes 36 items from 4 scales representing Hostility, Risk-Taking, Social Support, and Social Desirability.

• Treatment Engagement (TCU ADC EngForm)

includes 36 items from 4 scales representing Treatment Participation, Treatment Satisfaction, Counseling Report, and Peer Support.

The Criminal Thinking Scales (TCU ADC CTSForm)

includes 36 items from 6 scales representing Entitlement, Justification, Power Orientation, Cold Heartedness, Criminal Rationalization, and Personal Irresponsibility.

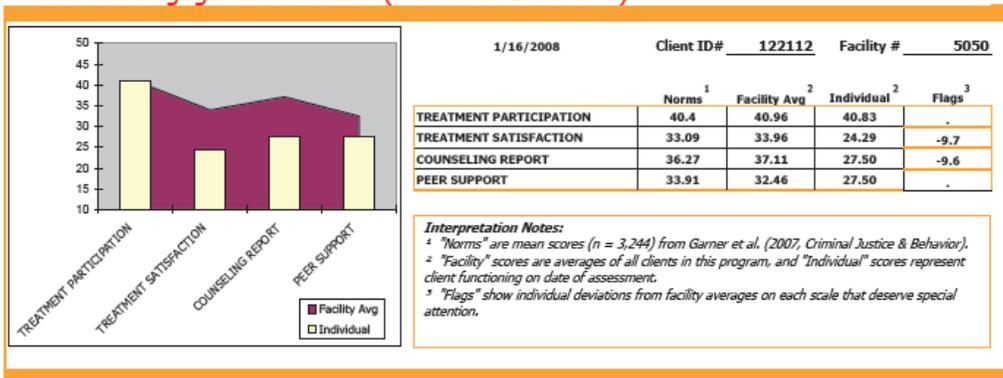
Data collection and scoring



Procedurally, each completed TCU ADC Form is fed through the optical reading process, and item scores are then stored in a data file according to form type and scale. This file in turn is accessed on command by the TCU (Excel-based) templates to score and simultaneously prepare a feedback report for clinical interpretations, as illustrated below (*Sample of Clinical Feedback Report*). Depending on specifications of the local “management information system” regarding infrastructure and related applications, these records might be further enhanced by users and also be incorporated into “real-time” clinical management data systems.

TCU ADC Forms scoring templates are available on request from TCU (at no charge to service providers) for converting the ASCII records into data files, calculating scale scores, and generating client-level assessment feedback reports (contact **Julie Gray** at j.gray2@tcu.edu for more information). Training

Treatment Engagement Process (from TCU ENGForm)



SAMPLE

Sample of Clinical Feedback Report for the TCU ADC EngForm created by a Excel-based template

workshops are expected to be available periodically, and establishment of mutual-help "user groups" is encouraged.

TCU Excel-based templates score data files and prepare a feedback report for clinical interpretations.

ADC system purchase



For an economical optical mark reader, the [Scantron® Model ES2010ADF](#) is recommended. It provides single-sided reading of pencil markings and includes a 150 sheet automatic document feeder, single output hopper (with transport speed of up to 2,000 forms per hour). [Scanbook](#) is the bundled utility software for creating Windows-based ASCII files in which the scanning results are recorded.

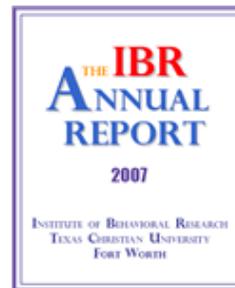
The purchase price negotiated by the TCU team for this hardware-software package is \$4200. (Note that TCU has no financial interests or benefits that result from the purchase of these machines.)

Purchase of TCU ADC Forms



[Information for ordering](#) pre-printed TCU ADC Forms in bulk is available. Costs average 10-15 cents per form, depending on quantity ordered. (Note: TCU has no financial interests or benefits that result from purchases of these forms.)

Special formatting for automated data capture is incorporated into these pre-printed forms for scanning purposes. Each form has a template available at no cost from TCU (based on Microsoft Excel®) for scoring items and providing interpretative feedback in graphic and narrative formats. Scoring and clinical feedback protocols have been prepared by TCU researchers, in conjunction with several field collaborators, and are subject to on-going development and refinement. ■



2007 IBR Annual Report now available on the IBR Web site

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IBR Web site wins STC's "Award of Excellence"

On the basis of several major content changes in the IBR Web site, the site was entered into the [Society of Technical Communication \(STC\)](#) Online Communication Competition. The Lone Star Chapter of STC conferred the 2008 "Award of Excellence" for IBR's Web site, an award recently achieved in 2001.

New on the Web: The [2007 IBR Annual Report](#) is available for downloading from the Web site. Check the site's homepage (recent rendition pictured at right) regularly for additions and updates.

