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Author(s): Kevin Knight; D. Dwayne Simpson; Janis T.

Morey

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An Evaluation of the TCU Drug Screen

Kevin Knight, D. Dwayne Simpson, and Janis T. Morey

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Correspondence should be addressed to the Institute of Behavioral Research, Texas Christian University, TCU Box 298740, Fort Worth, TX, 76129. More information (including data collection instruments that can be downloaded) is available on the Internet at www.ibr.tcu.edu and electronic mail can be sent to ibr@tcu.edu.

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FINAL REPORT/LACTURE

Abstract

Although most criminal justice agencies across the United States have become invested in treating drug-abusing offenders in the past decade, the demand for treatment resources has continued to exceed availability. Not only must officials decide who should have access to limited treatment services, but they also need to determine the most appropriate type and intensity of treatment in which a drug-involved offender should be placed. These critical decisions are complicated even further in correctional systems that process several hundred inmates per month. For these agencies, effective and efficient drug abuse screening and treatment referral protocols are essential.

The primary goal of this project was to examine psychometric properties and validity of the Texas Christian University Drug Screen (TCU Drug Screen), an experimental instrument in early stages of implementation at several large correctional settings across the U.S. Initially, the manner in which the TCU Drug Screen was being used in Texas prisons and state jails was explored. Psychometric properties for this instrument were established and reported next, with a particular focus on the internal consistency of the first nine items on the front page of the screen. In addition, normative data was provided on prominent subgroups defined by sociodemographic and criminal background variables. Finally, a revised version of the instrument was developed and has been made available as a free download from http://www.ibr.tcu.edu.

Ultimately, this project demonstrated that the TCU Drug Screen is reliable and effective when used to assess the severity of drug use problems. Products from this grant include the following:

Publications

Knight, K. (2002). Factors to consider when choosing a screen for drug-use problems. Offender Substance Abuse Report, II(3), 35-39.

Knight, K., Simpson, D. D., & Hiller, M. L. (2002). Screening and referral for substance-abuse treatment in the criminal justice system. In C. G. Leukefeld, F. M. Tims, & D. Farabee (Eds.), <u>Treatment of drug offenders: Policies and issues</u> (pp. 259-272). New York: Springer.

Presentations

Knight, K. (2001, April). <u>The TCU Drug Screen</u>. Invited presentation at the annual meeting of the Academy of Criminal Justice Sciences (ACJS), Washington, DC.

Knight, K., Hiller, M. L., & Simpson, D. D. (2000, November). Screening offenders for intensive treatment: The role of recidivism risk and drug use severity.

Paper presented at the annual meeting of the American Society of Criminology (ASC), San Francisco, CA.

Knight, K. (1999, April). Enhancing the California Department of Corrections

Screen for Drug Problems. Invited presentation at the Custodial Classification and

Clinical Assessment: Bridging the Gap meeting, sponsored by the San Diego Addiction

Technology Transfer Center and the Center, San Diego, CA.

Knight, K., & Hiller, M. L. (2000, February). <u>Corrections-based treatment:</u>

<u>Screening, process, and outcomes</u>. Invited workshop presented at the Texas Commission on Alcohol and Drug Abuse (TCADA) Best Practices IV Conference, Austin, TX.

Knight, K., Hiller, M. L., Broome, K. M., & Simpson, D. D. (1999, November).

An evaluation of the TCU Drug Screen. Paper presented at the annual meeting of the American Society of Criminology (ASC), Toronto, Ontario, Canada.

Executive Summary

Analyses of TCU Drug Screen data were based on a cohort of 18,364 Texas

Department of Criminal Justice (TDCJ) inmates (15,816 males and 2,548 females) who completed the screen between January 1 and April 30, 1999. The findings from this evaluation (NIJ Grant No. 1999-MU-MU-K008) revealed:

• The TCU Drug Screen was successfully implemented in small group correctional settings.

Because the TCU Drug Screen is a relatively new instrument, there is no established convention on how it should be implemented and used in making treatment referral decisions. Consequently, many agencies that have adopted the TCU Drug Screen are continuing to use the same implementation procedures they have used with their previous screening instrument. Although designed to be administered in a group or individual setting, the TCU Drug Screen was administered successfully by TDCJ staff almost exclusively in a small group setting (12-25 inmates per group) across several facilities.

A detailed discussion of many of the issues TDCJ faced in implementing the screen can be found in the book chapter by Knight, Simpson, and Hiller (2002) entitled "Screening and Referral for Substance-Abuse Treatment in the Criminal Justice System" – a product of this grant.

The TCU Drug Screen was found to have good psychometric properties.

Although an increasing number of agencies are adopting the TCU Drug Screen as their primary drug screen, its credibility needed further testing. Of particular interest for this study was an examination of the TCU Drug Screen score. Based on the first nine items on the first page of the screen, a summative score of positive (i.e., "yes") responses was calculated. Inmates who provided three or more positive responses were then

classified as having drug-related problems and referred to a correspondingly appropriate level and intensity of treatment services. As illustrated in Table 1, 30% of the overall sample scored at or above the cutoff score of "3"; however, there were subgroup variations (see Tables 2 through 7). Conventional item analyses revealed "yes" responses ranged from 11% for Question 9 to 39% for Question 6 ("yes" to 6a, 6b, or 6c). Inter-item correlations (see Table 15) ranged from .37 (Question 6 and Question 9, and Question 6 and Question 8) to .74 (Question 8 and Question 9).

Next, to assess the uniformity and precision of the TCU Drug Screen items in assessing drug use severity, item-to-total correlations, and Cronbach Alpha coefficients were computed for the entire sample as well as subgroups. The scale's overall reliability (see Table 8) was good (coefficient alpha = .89), with item-total correlations ranging from .37 and .58, and individual item "yes" responses ranged from 10% to 39%. Across all subgroups (see Tables 9 through 14), reliability coefficients were nearly identical, suggesting that the screen was reliable at detecting the severity of drug use, regardless of subgroup affiliation.

In an effort to examine the relationship between an inmate's drug use severity level and the probability of responding "yes" to a given item, Item Response Theory analyses (Rasch, 1980) was conducted. In addition, IRT was used to examine the "informativeness" or precision of an item across various drug use severity levels. Results revealed that all nine DSM-like items (on the front page) contributed important and necessary information toward the overall scale score, and the simple summative scoring scheme was found to be nearly as good as a statistically optimally weighted scoring algorithm (Knight, Hiller, Broome, & Simpson, 2000).

Normative responses for the overall sample and subgroups were documented.

Although drug use severity indicators are provided by the TCU Drug Screen, it is helpful to know how an offender's score compares with inmates of a similar profile. For

example, a female offender may have a drug use severity score higher than the average score for the general prison population, but it may be lower than the average drug use severity score for the general female prison population. Likewise, comparisons across groups of offenders may reveal that specific types of inmates have higher average drug use severity levels and are therefore in greater need of treatment. Again, it may be that female inmates have a higher average level of drug use severity and should have a greater proportion of treatment slots available for them. These types of comparisons require that normative information be available.

Therefore, overall responses as well as subgroup responses to the first nine items, the continuous TCU Drug Screen score, and the dichotomous TCU Screen Score are presented in Tables 1 through 7. As expected, many of the subgroups varied. For example, 39% of the females versus 28% of the males scored at or above the cutoff score (see Table 2). This difference was expected given that females are further along typically in their addiction career before the legal system is willing to imprison them. Consistent with other research examining race/ethnicity, differences also were found: 34% of the whites, 31% of the Hispanics, and 26% of the blacks met the threshold for drug-related problems (see Table 3). Results across age groups, however, were inconsistent (Table 4; 29% for those less than or equal to 21 years of age, 27% for those 22 to 29 years of age, 33% for those 30 to 39 years of age, and 28% for those 40 years of age or older). Based on responses to "most serious drug problem" (See Table 5), four out of five (88%) of those who reported using "opiates" scored at or above the threshold score on the TCU Drug Screen and approximately two-thirds of those who reported using cocaine, hallucinogens, inhalants, and stimulants scored at or above the threshold. As illustrated in Table 6, one in three inmates (34%) who had a drug-related offense (Drug Offense or DWI) or a robbery offense (33%) scored "3" or more on the TCU Drug Screen. Finally, 36% of those serving time in a State Jail facility and 28% of those serving time at an Institutional Division prison scored at or above the threshold score on the TCU Drug

Screen. Given that most drug offenses are classified as a 4th degree felony, State Jails, when compared to Institutional Division prisons, should have a greater proportion of inmates with drug offenses.

• A revised TCU Drug Screen was developed.

Based on feedback from interviewers and inmates, as well as the results from the analyses of the screen's psychometric properties, a revised screen, called the TCU Drug Screen II (see Appendix), was developed and is available to the public to download for free from our website at http://www.ibr.tcu.edu.

An Evaluation of the TCU Drug Screen

Fueled primarily by an increase in the number of offenders with drug problems and by mandatory sentencing laws, a phenomenal growth in the correctional population in recent years has led to several states building a large number of new prison and jail facilities (Bureau of Justice Statistics, 2000). For example, a building boom in Texas over the past decade has tripled its prison capacity, from 50,000 to nearly 150,000 (Criminal Justice Policy Council, 2001). Furthermore, recent estimates suggest that over half of the admissions to the nation's state and federal correctional facilities had used drugs in the month before their offense (Bureau of Justice Statistics, 1999). Almost one in three prisoners said they had committed their current offense while under the influence of drugs, and about one in six had committed their offense to get money for drugs. In addition, a quarter of state and a sixth of federal prisoners had experienced problems consistent with a history of alcohol abuse or dependence. For example, 41% of state prisoners and 30% of federal prisoners reported having consumed as much as a fifth of liquor in a single day, and 40% state and 29% of federal prisoners said they had a past alcohol-related domestic dispute. Financially, the U.S. spends \$30 billion each year to incarcerate offenders with drug problems (National Center on Addiction and Substance Abuse, 1998).

In an attempt to curb this growth and to enhance public safety, most criminal justice agencies have increased their provision of drug treatment services to drug-involved offenders. Treatment within corrections provides a unique opportunity to identify and successfully rehabilitate (or habilitate) drug-involved offenders who are likely, if untreated, to return to a personally and socially destructive pattern of drug use and criminal activity following release from prison (Lipton, Falkin, & Wexler, 1992; Peters, 1992; Wexler, Falkin, & Lipton, 1990). As recent studies have demonstrated clearly, focused rehabilitation-oriented treatment services can lead to favorable outcomes following incarceration (Andrews et al., 1990; Gendreau, 1996). Intensive long-term

treatment programs (such as modified in-prison therapeutic communities), for example, have been found to reduce post-incarceration relapse (i.e., return to drug use) and recidivism (i.e., arrests, reconviction, and reincarceration). Nationally recognized studies, such as evaluations of Delaware's Key-Crest, California's Amity, and Texas' Kyle in-prison therapeutic community (ITC) treatment programs, have shown that, compared to their untreated counterparts, drug-involved inmates who complete in-prison drug treatment are significantly less likely to return to a life of drug use and crime following release from prison (Knight, Simpson, & Hiller, 1999; Martin, Butzin, Saum, & Inciardi, 1999; Wexler, Melnick, Lowe, & Peters, 1999). Furthermore, these findings are even more pronounced among those who participate in treatment during community reentry (Griffith, Hiller, Knight, & Simpson, 1999; Hiller, Knight & Simpson, 1999a).

Nonetheless, the recent expansion of successful corrections-based treatment programs has not kept pace with the growing need for these services. Treatment slots within the correctional system continue to be unable to meet the demand. In a 1997 survey of State department of corrections, 70 to 85 percent of over 1 million State prisoners were found to be in need of substance abuse treatment; yet only 13 percent were receiving treatment prior to being released (National Center on Addiction and Substance Abuse, 1998). Even with the recent initiatives to expand the availability of treatment to criminal offenders, it is unlikely that the demand for treatment will ever be met fully.

The Need for Drug Abuse Screening

Because corrections-based treatment resources and services are limited, and because it is neither possible nor practical to provide treatment (particularly intensive residential treatment) to every drug-involved offender, criminal justice officials must make critical decisions regarding what services to provide drug-involved offenders. Ideally, the provision of services is optimally matched to an offender's needs. However, many correctional systems must make decisions on a relatively large number of offenders

in short periods of time with limited staffing and budget resources. For example, in 1999, the Texas Department of Criminal Justice (TDCJ) Program and Services Division (PSD) coordinated the drug abuse screening and treatment referral process of over 3,300 new inmates each month to Institutional Division (ID) and State Jail Division (SJD) facilities (this does NOT include the Texas' Adult Probation system). They did not have the time or resources to conduct lengthy face-to-face clinical interviews with each new admission. Therefore, correctional agencies such as TDCJ have a tremendous need for a reliable, valid, and short assessment of drug problems that is relatively inexpensive (or free), accurate, and minimally disruptive to the operations of their already overburdened system (Wish, 1988, 1990). As a result, assessment instruments often are selected before recommended research and development protocols are completed.

The need for an efficient and accurate drug screen also has been recognized as being important at the Federal level. The U.S. Department of Justice, National Institute of Corrections' Report of the National Task Force on Correctional Substance Abuse Strategies (1991) calls for the need to "identify, develop, and implement a standardized, comprehensive method for assessing alcohol and substance abuse appropriate to the specific offender population." The report points to the need for a consistent and objective way to deal with large caseloads and to generate an information database for use in future treatment planning and evaluation. Correctional systems that fail to properly screen and evaluate drug-involved offenders will have a difficult time developing efficient referral processes to treatment slots. Furthermore, inappropriate referrals occupy costly treatment beds and result in considerable staff time spent managing disruptive behavior and responding to those resistant to treatment (Peters, 1992).

Existing Screening Instruments

Although several good drug-screening instruments have been developed, they typically have limited application within criminal justice settings. For example, the Offender Profile Index (OPI) was designed to serve as a broad "sorting" tool that could

be used to assist in making recommendations for general treatment or intervention alternatives; it was not designed to be a complex clinical assessment instrument for guiding a treatment plan (Inciardi, McBride, & Weinman, 1993). However, the instrument requires a 30-minute face-to-face interview, and many criminal justice agencies simply do not have the staffing resources to complete it for all new admissions. Another instrument, the Addiction Severity Index (ASI), was developed as a comprehensive diagnostic tool and focuses on seven problem areas: alcohol use, medical condition, drug use, employment/support, illegal activity, family/social relations, and psychiatric problems (McLellan et al., 1985). Like the OPI, however, the ASI is completed in a face-to-face interview and often is too lengthy to administer on an individual basis to every offender in large correctional systems (self-administered versions have not been very satisfactory). Typically, the ASI is administered as a psychosocial assessment after an offender is placed into treatment, not as a screening tool prior to treatment. The Simple Screening Instrument (SSI), developed by the Center for Substance Abuse Treatment, is a 16-item screening instrument that assesses symptoms of alcohol and drug dependency that has been found to be effective in identifying substance "dependent" inmates (Peters & Greenbaum, 1996). Although relatively short and more amenable for use in large correctional settings, the SSI has been found to be more prone than other instruments (such as the ASI) to classify incorrectly an individual as being drug dependent. For large correctional systems, an obvious goal of the screening process is to minimize inappropriate referrals to treatment as well as to maximize appropriate placements, thus increasing systems efficiency and cost-effectiveness.

The Texas Christian University (TCU) Drug Screen

The original TCU Drug Screen was developed by our group of researchers at the Institute of Behavioral Research at Texas Christian University and has shown promise in meeting the substance abuse diagnostic needs of large correctional systems. It has been used since 1993, originally as part of an earlier version of the instrument called the Brief

Background Assessment (BBA; see Broome, Knight, Joe, & Simpson, 1996, for more detail). Revised twice since its earlier version as the BBA, the TCU Drug Screen includes 19 items that represent key clinical and diagnostic criteria for substance "dependence" as they appear in the Diagnostic and Statistical Manual (DSM; American Psychiatric Association, 1987) and the National Institute of Mental Health (NIMH) Diagnostic Interview Schedule (DIS; Robins, Helzer, Croughan, & Ratcliff, 1981). These criteria were adapted for use within criminal justice settings by rewording "clinical" language to be more appropriate for individuals with eighth-grade reading levels and by using a format that promotes reliable self-administration (Broome, Knight, Joe, & Simpson, 1996). The first part of the TCU Drug Screen includes a series of 10 questions about problems related to "drug use," and the second part addresses the frequency of specific drug use prior to prison as well as a self-assessment of one's readiness for substance abuse treatment. Based on the first nine items of the TCU Drug Screen, a continuous composite score is computed that measures the level of an offender's drug use severity. Classification criteria for drug use "dependency" parallels the DSM protocols, based on any combination of three "positive" responses out of the first nine items. The remaining TCU Drug Screen items are designed to provide corroborative evidence of potential drug use problems, such as questions pertaining to prior drug treatment.

The TCU Drug Screen can be completed as part of an interview or self-administered, and our prior research shows it elicits information that is highly consistent with other data sources (Broome, Knight, Joe, & Simpson, 1996). Although the credibility of self-reported information by offenders sometimes is considered suspect, research shows valid drug use data can be obtained in settings where no sanctions are applied for truthful self-disclosure (Wish, 1988). Indeed, some of the best estimates of drug use have come from studies involving personal interviews or self-administered

questionnaires, and much of what is known about the relationship of drug abuse to crime also has come from studies that have relied upon offender's self reports.

In settings where there is potential underreporting of drug use, self-reports still may be used to identify those who are willing to admit to heavy drug use and are ready for treatment. Indeed, persons who admit to drug or alcohol dependence or to a need for treatment are the most likely to report recent drug use and prior treatment (Wish, 1988). Even with the potential for underreporting, the number of persons who self-disclose drug problems and seek treatment services is likely to exceed treatment resources. In Texas, for example, almost half of new admissions to the TDCJ self-admitted drug use problems during the first month the TCU Drug Screen was implemented, far exceeding the treatment slots available.

Prior research with the TCU Drug Screen. An article based on the original version of the TCU Drug Screen, entitled "Evaluating the drug-abusing probationer: Clinical interview versus self-administered assessment" (by Broome, Knight, Joe, & Simpson, 1996) compared probationer responses given under two types of administration – one using an interview format, and the other using self-administration – approximately 1 week apart. The generally high agreement indicated good test-retest reliability of the instrument and demonstrates it can be administered in a variety of formats.

A detailed unpublished investigation funded by the Center for Substance Abuse Treatment (CSAT) has provided additional, yet limited, empirical support for the utility of the TCU Drug Screen (Peters & Greenbaum, 1996). In this study, researchers conducted a field test with 400 new inmates in Texas prisons in 1996. They compared drug abuse and dependence classifications based on the Structured Clinical Interview for DSM-IV (SCID-IV) with eight other instruments, including the TCU Drug Screen, Alcohol Dependence Scale (ADS), Addiction Severity Index (ASI Drug Use and Alcohol Use Sections), Drug Abuse Screening Test (DAST), Michigan Alcohol Severity Test

(MAST), Substance Abuse Subtle Screening Inventory-2 (SASSI-2), Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES Forms 7AS and 7DS), and the Simple Screening Instrument (SSI). The study identified the TCU Drug Screen as one of three instruments (along with SSI, and the ASI/ADS) to have faired well in identifying "dependent" inmates. A shorter published version of this study also provided the same conclusion (Peters et al., 2000).

Need for further investigation. Based on these preliminary research findings, the TCU Drug Screen recently has gained further popularity. For example, these findings along with pressing needs that could not wait for a comprehensive psychometric study led the Texas Department of Criminal Justice to select the TCU Drug Screen as its screening instrument. Texas is using the form to assess drug use problems and need for drug treatment among all new prison and state jail admissions (averaging 3,300 assessments per month). The TCU Drug Screen also has been adopted for use by several other state and local correctional treatment agencies.

However, as noted earlier, prior research with the TCU Drug Screen has been limited and based on an earlier version of the current form. Although its administration has been going smoothly within TDCJ, the implementation protocol of the TCU Drug Screen needs to be examined more closely. Furthermore, practical and scientific questions remain as to the credibility of the form that only can be answered through establishing basic psychometric properties of the scale. In addition to these issues, norms are needed in order to provide relative meaning to the scores derived from the TCU Drug Screen. Through normative data, logical and legitimate comparisons can be made between a given offender and other offenders who may be similar with respect to specific characteristics, such as gender and race-ethnicity. This information, in turn, will help address questions pertaining to drug problem severity and who needs to be selected for treatment.

An extensive evaluation of the TCU Drug Screen is vital for establishing its legitimacy for the identification of drug-involved offenders and their subsequent referral to treatment. Given the widespread (and potentially greater) use of the form, the TCU Drug Screen must be examined with greater precision, particularly with a larger sample and under the routine operating protocol of a large correctional system. These practical research needs have both scientific and legal implications.

Project Overview

The overall purpose of this NIJ-funded evaluation was to examine the psychometric properties and credibility of the TCU Drug Screen (original version used by TDCJ, see Appendix) as an instrument to assess drug use severity for treatment referral decisions in correctional settings.

The specific aims of this study were to:

- (1) Examine the TDCJ implementation protocol for the TCU Drug Screen;
- (2) Substantiate the forms credibility through a comprehensive assessment of its psychometric properties, including estimates of internal consistency reliability,
- (3) Establish normative data for representative samples of Texas inmates, thereby providing severity of drug use information for logical and meaningful referent groups, and providing a means to identify subsamples with the highest levels of drug use and greatest need for treatment; and finally,
- (4) Provide a revised version of the instrument for public dissemination.

Research Design and Methods

TDCJ Treatment Services

The Programs and Services Division (PSD) of the Texas Department of Criminal Justice (TDCJ) coordinates all substance abuse treatment services for its Institutional

Division (ID) and State Jail Division (SJD) offenders. This includes screening and making treatment referral decisions for newly admitted TDCJ-SJD and TDCJ-ID inmates based on their TCU Drug Screen score, time remaining to be served on their sentence, and type of criminal offense.

In Texas, those convicted of an offense greater than a fourth-degree felony are sentenced to prison within the TDCJ-ID. While in prison, all inmates are offered the opportunity to participate in self-help groups and in drug education programming. Inmates identified as needing drug treatment and who meet specific screening criteria (e.g., no prior sex offense, sufficient time left to serve) also may be selected to participate in a 9-month In-Prison Therapeutic Community (ITC) program or a 6-month Pre-Release Substance Abuse Programs (PRSAP). Participation is considered to be voluntary.

Offenders convicted of a fourth-degree state felony are sentenced to a state jail with a sentence not to exceed 2 years. TDCJ-SJD standards require that state jail confinees be assessed and, if needed, given substance abuse programming within their assigned unit. Those identified in need of treatment are mandated to either a 4-month therapeutic community treatment program within the state jail (if an inmate has sufficient time remaining on his or her sentence) or to a "low-intensity" program, such as 24 hours of drug education or 10 hours of "Substance Abuse Pretreatment"; all state jail inmates are offered the opportunity to participate voluntarily in 12-step self-help groups.

Sample Description

The proposed project included all 18,364 TDCJ inmates (15,816 males and 2,548 females) who completed the TCU Drug Screen between January 1 and April 30, 1999. On average, subjects were 33 years of age, ranging from 16 to 86 years. Other demographic characteristics included 43% African American, 35% white, 22% Hispanic, and, on average, scored at the 6th grade education level on an educational achievement test. Many were imprisoned for a drug (35%) or property (28%; includes burglary,

larceny, forgery, and auto theft) offense, with 19% having a violent offense (includes homicide, robbery, assault, and kidnapping).

TDCJ-ID and 4,462 were TDCJ-SJD inmates. When compared with the TDCJ-SJD inmates, TDCJ-ID inmates were significantly less likely (chi-square and t-tests, p < .05) to be male (10% vs. 25%), African American (40% vs. 51%), incarcerated for a drug-related offense (28% vs. 57%) or property offense (24% vs. 39%), and were significantly more likely to be incarcerated for a violent offense (25% vs. 1%), older on average (34 vs. 32 years of age), and better educated (6th vs. 5th grade average educational achievement score).

Follow-up subsamples. As part of this proposal, the relationship between TCU Drug Screen information and post-release reincarceration was examined. Of the 18,364 subjects, 4,685 inmates (2,332 TDCJ-ID and 2,353 TDCJ-SJD) had been released from TDCJ at least one year prior to the collection of reincarceration data, thus eligible to be included in analyses of 1-year post-release reincarceration data. The remaining subjects had either not been released or were released within the year and were therefore excluded from follow-up analyses.

ASI-subsamples. At some of the TDCJ facilities, inmates also were administered the drug use section of the Addiction Severity Index (ASI) as part of a one-on-one interview. Typically, this occurred when an inmate's response to the TCU Drug Screen was believed to be untruthful and TDCJ staff sought additional, corroborating information about the offender's drug use. Of those subjects in this study, a total of 3,245 were administered the drug use section of the ASI. This included 3,092 TDCJ-ID and 153 TDCJ-SJD inmates.

Results

AIM 1: Examine the TDCJ Implementation Protocol for the TCU Drug Screen

Although various ways of administering the form (such as in group versus individually) were not tested directly as part of this study, two informal meetings were held with staff at the Texas Department of Criminal Justice-Program and Services Division (TDCJ-PSD), and administration of the screen was observed. Although designed to be administered in a group or individual setting, the TCU Drug Screen was administered by TDCJ staff almost exclusively in a small group setting (12-25 inmates per group) across several facilities. A staff person handed out the instrument and explained that TDCJ provided treatment services to inmates who had a demonstrated need and that responses to the instrument could have an impact on whether or not they received treatment services while incarcerated. Toward the last few months of the project, interviewers were instructed to remind inmates that untruthful responses (particularly if inconsistent with other information in their file such as admissions of drug use during a presentence investigation) might not be viewed favorably during the prerelease supervision review process. The TCU Drug Screen instructions and items were then read aloud, with inmates being asked to follow along and to respond only after an item was read. For those who did not speak English, a bilingual staff or inmate assisted in the administration of the form. Once completed, the screens were optically scanned and scored and a computer-generated report with the TCU Drug Screen was printed. The level and intensity of treatment services needed was then determined and a referral decision was made.

Interviewers reported that they believed it was critical that the instrument was administered early in the intake process, before the inmate has had a chance to hear "rumors" about the purpose of the screen. They also reported that inmates were much more likely to report drug-related problems when they were informed that the information might be used in making post-release supervision decisions and that failure

to disclose problems that were otherwise documented (such as in their correctional file) might have a negative impact on the decision. Because of suspicion that some inmates still would fail to disclose drug-related problems, a policy was developed toward the end of the project that required subsequent one-on-one interviews (including talking with the inmate one-on-one and administering the Addiction Severity Index Drug Use section) for those who did not indicate on the TCU Drug Screen that they had drug-related problems (i.e., scored 0, 1, or 2). During this process, a review of existing records also was conducted to determine if there was any evidence of drug related problems, such as an admission of drug use during the presentence investigation, and the inmate was confronted with this information. As illustrated in the following figure, this subsequent step resulted in an additional 19% being identified as having a significant drug problem and being recommended for treatment. It is worth noting that 1 out of 5 inmates who scored less than 3 on the TCU Drug Screen reported that it was important that they got drug treatment while in prison (Question #18); a response that may need to be considered when making referral decisions.

In addition, a group of approximately 40 inmates were asked to provide informal feedback on the TCU Drug Screen, which they had just completed as part of their intake process. Feedback from one inmate centered on suspicion that, despite assurances to the contrary, his responses were going to be used "against them" while he was incarcerated. Some of the inmates expressed concern that they were going to be required to do "more things" if they disclosed their drug problems. They emphasized the need for the interviewer to take the time to explain why the screen is being given and why they should respond honestly. They also explained that some interviewers had the attitude of "hurry up, shut up, fill this out and turn it in" and that questions typically were not encouraged. Instead, inmates believed that the items needed to be explained after being read and that many of them have questions as to what the items mean and should be allowed to ask them. Inmates also indicated that they expected the "yes" response to come before the

"no" response option, and that changing the ordering could make a difference in the overall "yes" response rate. Finally, inmates that only spoke Spanish indicated that having a Spanish version of the form would have been helpful; however, it is important to note that since many of these inmates could not read English or Spanish, this would have been helpful only if administered by the interviewer.

For a detailed discussion of many of these issues, see the book chapter by Knight, Simpson, and Hiller (2002) entitled "Screening and Referral for Substance-Abuse Treatment in the Criminal Justice System" – a product of this grant.

Aim 2: Substantiate the forms credibility through a comprehensive assessment of its psychometric properties, including estimates of internal consistency reliability

Although an increasing number of agencies are adopting the TCU Drug Screen as their primary drug screen, its credibility needs further testing. A screen for drug use severity to be used in large correctional settings must be able to provide documented evidence of its reliability and validity. We therefore conducted a comprehensive assessment of the TCU Drug Screen basic psychometric properties, including estimates of internal consistency reliability. First, basic measurement statistics of distributional properties, such as means, standard deviations, central tendencies, and inter-item correlations were calculated.

Of particular interest for this study was an examination of the TCU Drug Screen score. Based on the first 9 items on the first page of the screen, a summative score of positive (i.e., "yes") responses was calculated. Inmates who provided three or more positive responses were then classified as having drug-related problems and referred to the appropriate level and intensity of treatment services. As illustrated in Table 1, 30% of the overall sample scored at or above the cutoff score of "3"; however, there were subgroup variations (see Tables 2 through 7). Conventional item analyses revealed "yes" responses ranged from 11% for Question 9 to 39% for Question 6 ("yes" to 6a, 6b, or 6c).

Inter-item correlations (see Table 15) ranged from .37 (Question 6 and Question 9, and Question 6 and Question 8) to .74 (Question 8 and Question 9).

Next, to assess the uniformity and precision of the TCU Drug Screen items in assessing drug use severity, item-to-total correlations, and Cronbach Alpha coefficients were computed for the entire sample as well as subgroups. The scale's overall reliability (see Table 8) was good (coefficient alpha = .89), with item-total correlations ranging from .37 and .58, and individual item "yes" responses ranged from 10% to 39%. Across all subgroups (see Tables 9 through 14), reliability coefficients were nearly identical, suggesting that the screen was reliable at detecting the severity of drug use, regardless of subgroup affiliation.

In an effort to examine the relationship between an inmate's drug use severity level and the probability of responding "yes" to a given item, Item Response Theory analyses (Rasch, 1980) was conducted. In addition, IRT was used to examine the "informativeness" or precision of an item across various drug use severity levels. Results revealed that all nine DSM-like items (on the front page) contributed important and necessary information toward the overall scale score, and the simple summative scoring scheme was found to be nearly as good as a statistically optimally weighted scoring algorithm (Knight, Hiller, Broome, & Simpson, 2000). For example, item response functions and item information for Questions 6 and 9 are illustrated below in Figures 1-3.

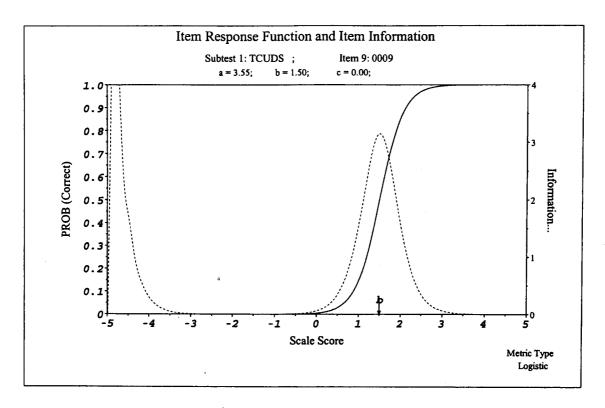


Figure 1

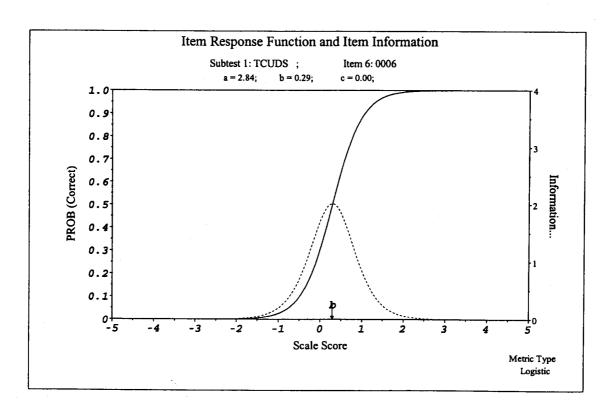


Figure 2

Weighted vs. Non-Weighted Scoring

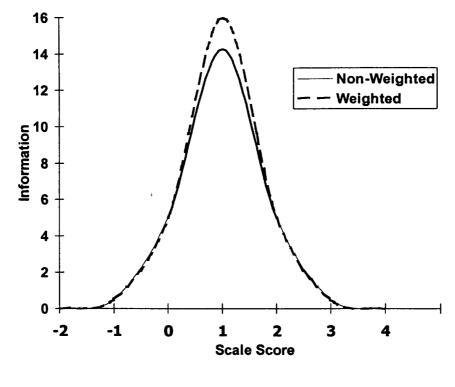


Figure 3

An instrument's credibility also is determined, in part, by how well it captures information comparable to that provided by similar, empirically tested instruments. Currently, the Addiction Severity Index (ASI) is a popular and widely accepted psychosocial instrument used in correctional settings to determine an offender's type and level of drug use. Although one of our original goals was to assess the comparability, or concurrent validity, of the TCU Drug Screen with the lengthier, more comprehensive ASI, TDCJ changed the administration protocol for the ASI so that it was given *only* to a subsample of 3,245 inmates who failed to disclose drug use problems on the TCU Drug Screen. Furthermore, prior to ASI administration, an interviewer explained to the inmate that this was their second chance to report any drug-related problems, was confronted

with any corroborating evidence of drug use from their file, and then informed that parole review boards do not look favorably upon inmates who are suspected of being dishonest. Although it was not possible to use the data to cross-validate the TCU Drug Screen data, it is worth noting that 64% of those who were given the ASI drug-use section reported having serious drug-related problems. For agencies that want to make sure that inmates with drug-related problems are identified, this protocol of conducting a file review and reinterviewing the inmate, along with a reassessment, might prove useful.

Finally, we examined whether the TCU Drug Screen score was predictive of return-to-custody within one year of release from prison (see Table 17). Of the 4,685 TDCJ inmates (2,332 TDCJ-ID and 2,353 TDCJ-SJD) who were released from the TDCJ facility and who had the opportunity to be in the community for at least one year, 15% were returned to prison (because of a new offense or technical violation) within a year. Those who were returned had a slightly higher average TCU Drug Screen score (2.11) than did those who were not returned (1.94). Likewise, those who were returned had a slightly higher percentage who scored above the threshold on the TCU Drug Screen (.33) than did those who were not returned (.30). To fully assess the screens predictive validity, however, future studies will need to control for a number of mediating factors, such as drug treatment participation.

Aim 3: Establish normative data for representative samples of Texas inmates, thereby providing severity of drug use information for logical and meaningful referent groups, and provide a means to identify subsamples with the highest levels of drug use and greatest need for treatment

Although drug use severity indicators are provided by the TCU Drug Screen, it is helpful to know how an offender's score compares with inmates of a similar profile. For example, a female offender may have a drug use severity score higher than the average score for the general prison population; but, in fact, it may be lower than the average drug

use severity score for the general female prison population. Likewise, comparisons across groups of offenders may reveal that specific types of inmates have higher average drug use severity levels and are therefore in greater need of treatment. Again, it may be that female inmates have a higher average level of drug use severity and should have a greater proportion of treatment slots available for them. These types of comparisons require that normative information be available.

Therefore, overall responses as well as subgroup responses to the first nine items, the continuous TCU Drug Screen score, and the dichotomous TCU Screen Score are presented in Tables 1 through 7. As expected, many of the subgroups varied. For example, 39% of the females versus 28% of the males scored at or above the cutoff score (see Table 2). This difference was expected given that females are further along typically in their addiction career before the legal system is willing to imprison them. Consistent with other research examining race/ethnic differences, race differences were also found: 34% of the whites, 31% of the Hispanics, and 26% of the blacks met the threshold for drug-related problems (see Table 3). Results across age groups, however, were inconsistent (Table 4; 29% for those less than or equal to 21 years of age, 27% for those 22 to 29 years of age, 33% for those 30 to 39 years of age, and 28% for those 40 years of age or older). Based on responses to "most serious drug problem" (See Table 5), four out of five (81%) of those who reported using "opiates" scored at or above the threshold score on the TCU Drug Screen and approximately two-thirds of those who reported using cocaine, hallucinogens, inhalants, and stimulants scored at or above the threshold. As illustrated in Table 6, one in three inmates (34%) who had a drug-related offense (Drug Offense or DWI) or a robbery offense (33%) scored "3" or more on the TCU Drug Screen. Finally, 36% of those serving time in a State Jail facility and 28% of those serving time at an Institutional Division prison scored at or above the threshold score on the TCU Drug Screen. Given that most drug offenses are classified as a 4th degree

felony, State Jails, when compared to Institutional Division prisons, should have a greater proportion of inmates with drug offenses.

Aim 4: Provide a revised version of the instrument for public dissemination

As illustrated in Table 16, most of the items on the second page of the screen were highly skewed and provided very little helpful information regarding the needed level or intensity of treatment. For example, Question 13 asked "And how often did you share 'works' with some else while injecting drugs during those months?" Less than 4% of the sample responded with a score of at least "1". Likewise, only 5% responded "1" or more to Question 14, "How many times did you overdose on drugs in the last 6 months before your last incarceration?"

Based on these findings, as well as interviewer and inmate feedback, a revision to the TCU Drug Screen concentrated on changes to the second page. Major revisions to the original TCU Drug Screen included:

- 1) The form was designed in a format that is easy to scan, such as with TeleForm software. This provides for more rapid scoring and report generation.
- 2) To conform more closely with DSM criteria, the response timeframe for each question was changed from "During the last 6 months" to "During the last 12 months".
- 3) Subjective qualifiers, such as the word "often", were removed from the items to help provide for more consistent responses. For example, Question #4 was changed from "Did you often get so high or sick from drugs that..." to "Did you get so high or sick from drugs that..."
- 4) Based on interviewer and inmate feedback, the "No/Yes" response was replaced with a "Yes/No" response, where the "yes" option is presented before the "no" option.

- 5) For Question 10, the sub-items were formatted so that they were more clearly separated.
- 6) Only Questions 11, 12, 15, and 18 on the second page were retained, while a chart designed to assess drug use severity was added. This chart has been used successfully as part of the TCU Intake form for several years.

The revised screen, called the TCU Drug Screen II (see Appendix) is available to the public to download for free from our website at http://www.ibr.tcu.edu.

Conclusions

The TCU Drug Screen was found to have good psychometric properties and to be reliable across a variety of subgroups. Its brevity, along with being available to download for free, has made it a popular screening instrument in many correctional treatment agencies and programs.

It is important to note, however, that the use of the TCU Drug Screen may need to be accompanied by an examination of other sources of information – such as biological test results and custodial records. For many correctional facilities (such as county jails), corroborative information often is readily available. For example, urine tests are administered typically after arrest and positive results may indicate a need for treatment even when an inmate denies drug use. Likewise, drug problems may be evident in an offender's criminal record, such as having several previous arrests for driving while intoxicated, or in the presentence investigation report that includes an inmate's confession needing help for drug problems. Note, however, that as with self-report measures, biological tests and criminal records also have limitations that need to be considered when making screening and referral decisions. For example, there are several illicit drugs for which there are no biological tests currently available and, among potentially testable drugs, correctional officials often test for only a few types such as cocaine and opiates.

Correctional agencies must also be able to refer inmates to the appropriate level and intensity of treatment services. Unfortunately, very little is known about "treatment matching." In general, "higher risk" inmates require more intensive treatment (Simpson, Joe, Fletcher, Hubbard, & Anglin, 1999) while "lower risk" inmates may benefit equally as well from less intensive treatment. Studies of intensive prison-based treatment programs have found that they are most effective for high-risk inmates – that is, those with more serious antisocial backgrounds (e.g., history of extensive drug use and criminality) (Knight et al., 1999). On the other hand, individuals with comparatively less serious problems are likely to benefit from a variety of treatment options, regardless of modality or level of intensity (Knight et al., 1999; Simpson et al., 1999). Providing intensive treatment to low-risk offenders (e.g., those not drug-dependent and who do not have a history of prior incarcerations), however, is likely to have a minimal impact on reincarceration rates and may be wasting valuable taxpayer dollars and scarce treatment resources.

During this project, the need for comprehensive, on-going training became apparent. Although the TCU Drug Screen is fairly simple to administer, it still requires that interviewers understand the purpose of the screen, be able to explain it to the inmates, and be able to follow basic interviewing techniques. In an effort to boost response rates, TDCJ conducted an all-day training in 1999 to help provide interviewers with these basic skills. The results were fairly remarkable. As illustrated in Figure 5 below, response rates have improved dramatically, with 47% of the inmates meeting the threshold score for the TCU Drug Screen and an additional 24% being identified through "corroborating" information. The overall 71% "positive" rate has been able to be sustained in part because of "booster" training sessions that TDCJ-PSD staff have conducted at individual sites.

Assessing Treatment Needs

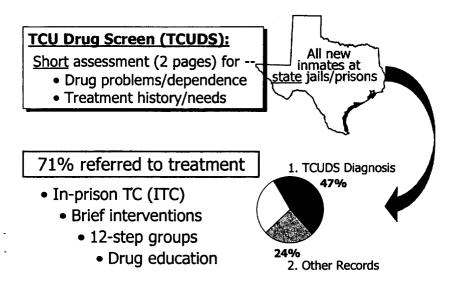


Figure 5

Overall, this project demonstrated that the TCU Drug Screen can be used effectively within correctional settings. Future research needs to examine more closely the screens concurrent validity with other well-established screens, such as those frequently purchased by correctional settings. Also, research needs to examine further the role of the screening process in conjunction with more comprehensive assessment in making the most appropriate referral decisions.

References

- American Psychiatric Association. (1987). <u>Diagnostic and statistical manual of mental disorders</u>. (3rd ed.). Washington, DC: Author.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. Criminology, 28, 369-404.
- Broome, K. M., Knight, K., Joe, G. W., & Simpson, D. D. (1996). Evaluating the drug-abusing probationer: Clinical interview versus self-report. <u>Criminal Justice and Behavior</u>, 23, 593-606.
- Bureau of Justice Statistics. (1999, January). <u>Substance Abuse and Treatment</u>, <u>State and Federal Prisoners</u>, 1997. NCJ-172871. Washington, DC: U.S. Department of Justice.
- Bureau of Justice Statistics. (2000, April). <u>Prison and Jail Inmates at Midyear</u> 1999 (NCJ-181643). Washington, DC: U.S. Department of Justice.
- Criminal Justice Policy Council. (2001). <u>Projection of adult correctional populations in Texas: Fiscal years 2001-2005</u>. Austin, TX: Author.
- Gendreau, P. (1996). Offender rehabilitation: What we know and what needs to be done. Criminal Justice and Behavior, 23, 144-161.
- Griffith J. D., Hiller, M. L., Knight, K., & Simpson, D. D. (1999). A cost-effectiveness analysis of in-prison therapeutic community treatment and risk classification. The Prison Journal, 79(3), 352-368.
- Hiller, M. L., Knight, K., & Simpson, D. D. (1999a). Prison-based substance abuse treatment, residential aftercare and recidivism. <u>Addiction</u>, 94(6), 833-842.
- Inciardi, J. A., McBride, D. C., & Weinman, B. A. (1993). The assessment and referral of criminal justice clients: Examining the focused offender disposition program. In J. A. Inciardi (Ed.), <u>Drug treatment and criminal justice</u> (pp. 149-193). Newbury Park, CA: Sage Publications.
- Knight, K., Hiller, M. L., Broome, K. M., & Simpson, D. D. (2000, March). Screening offenders for substance use problems. Paper presented at the annual meeting of the Academy of Criminal Justice Sciences (ACJS), New Orleans, LA.
- Knight, K., Simpson, D. D., & Hiller, M. L. (1999). Three-year reincarceration outcomes for in-prison therapeutic community treatment in Texas. <u>The Prison Journal</u>, 79(3), 337-351.
- Knight, K., Simpson, D. D., & Hiller, M. L. (2002). Screening and referral for substance-abuse treatment in the criminal justice system. In C. G. Leukefeld, F. Tims, & D. Farabee (Eds.), <u>Treatment of drug offenders: Policies and issues</u> (pp. 259-272). New York: Springer.

- Lipton, D. S., Falkin, G. P., & Wexler, H. K. (1992). Correctional drug abuse treatment in the United States: An overview. In C. G. Leukefeld & F. M. Tims (Eds.), Drug abuse treatment in prisons and jails (NIDA Research Monograph 118, DHHS Publication No. ADM 92-1884). Rockville, MD: National Institute on Drug Abuse.
- McLellan, A. T., Luborsky, L., Cacciola, J., Griffith, J., Evans, F., Barr, H. L., & O'Brien, C. P. (1985). New data from the addiction severity index: Reliability and validity at three centers. <u>Journal of Nervous and Mental Disease</u>, 173, 412-423.
- Martin, S. S., Butzin, C. A., Saum, C. A., & Inciardi, J. A. (1999). Three-year outcomes of therapeutic community treatment for drug-involved offenders in Delaware. <u>The Prison Journal</u>, 79(3), 294-320.
- National Center on Addiction and Substance Abuse. (1998, January). <u>Behind bars: Substance abuse and America's prison population</u>. New York: Author.
- Peters, R. H. (1992). Referral and screening for substance abuse treatment in jails. <u>Journal of Mental Health Administration</u>, 19(1), 53-75.
- Peters, R. H., & Greenbaum, P. E. (1996). <u>Texas Department of Criminal Justice/Center for Substance Abuse Treatment Prison Substance Abuse Screening Project</u>. Unpublished manuscript, University of South Florida.
- Peters, R. H., Greenbaum, P. E., Steinberg, M. L., Carter, C. R., Ortiz, M. M., Fry, B. C., & Valle, S. K. (2000). Effectiveness of screening instruments in detecting substance use disorders among prisoners. <u>Journal of Substance Abuse Treatment</u>, 18, 349-358.
- Rasch, G. (1980). <u>Probabilistic models for some intelligence and attainment tests</u>. Chicago: The University of Chicago Press.
- Robins, L. N., Helzer, J. E., Croughan, J., & Ratcliff, K. S. (1981). National Institute of Mental Health Diagnostic Interview Schedule: Its history, characteristics, and validity. <u>Archives of General Psychiatry</u>, 38, 381-389.
- Simpson, D. D., Joe, G. W., Fletcher, B. W., Hubbard, R. L., & Anglin, M. D. (1999). A national evaluation of treatment outcomes for cocaine dependence. <u>Archives of General Psychiatry</u>, 56, 507-514.
- U.S. Department of Justice. (1991). <u>Intervening with substance-abusing offenders: A framework for action</u> (Report of the National Task Force on Correctional Substance Abuse Strategies). Washington, DC: Author.
- Wexler, H. K., Falkin, G. P., & Lipton, D. S. (1990). Outcome evaluation of a prison therapeutic community for substance abuse treatment. <u>Criminal Justice and Behavior, 17(1), 71-92.</u>
- Wexler, H. K., Melnick, G., Lowe, L., & Peters, J. (1999). Three-year reincarceration outcomes for Amity in-prison therapeutic community and aftercare in California. <u>The Prison Journal</u>, 79(3), 321-336.

Wish, E. D. (1988). Identifying drug-abusing criminals. In C. G. Leukefeld & F. M. Tims (Eds.), Compulsory treatment of drug abuse: Research and clinical practice (NIDA Research Monograph 86, DHHS Publication No. ADM 88-1578). Rockville, MD: National Institute on Drug Abuse.

Wish, E. D. (1990). Drug testing and the identification of drug-abusing criminals. In J. A. Inciardi (Ed.), <u>Handbook of Drug Control in the United States</u> (pp. 229-266). New York: Greenwood Press.



TCU Drug Screen by Total Sample (N = 18,364)

	_	Total	Sample
		% Yes	(SD)
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	30	(46)
2.	Did you try to cut down on drugs and found you were unable to do it?	24	(43)
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	22	(42)
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	20	(40)
3.	Did you often spend less time at work, school, or with friends so that you could use drugs?	17	(37)
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	39	(49)
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	20	(40)
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	10	(31)
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	11	(31)
CU	Drug Screen Score (0-9; Mean)	1.9	(2.7
CU	Drug Screen Drug Dependency (Score > = 3, 0-1; mean)	30	(46)

Table 2

TCU Drug Screen by Gender

		Gender				
		Female $(N = 2,548)$		Male $(N = 15.816)$		
, .		% Yes		% Yes	(SD)	
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	35	(48)	29	(45)	
2.	Did you try to cut down on drugs and found you were unable to do it?	. 32	(47)	23	(42)	
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	32	(47)	21	(40)	
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	25	(43)	19	(39)	
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	24	(43)	16	(36)	
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	49	(50)	37	(48)	
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	25	(43)	19	(39)	
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	14	(34)	10	(30)	
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	14	(35)	10	(30)	
	TCU Drug Screen Score (0-9; Mean)	2.5	(2.9)	1.8	(2.6	
	TCU Drug Screen Drug Dependency (Score > = 3, 0-1; mean)	39	(49)	28	(45)	

Table 3

TCU Drug Screen by Race

		Race								
	- -	Black (N = 7,831)		White $(N = 6,396)$		Hispanic (N = 4,083)		Oth (N =		
		% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes		
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	26	(44)	34	(47)	30	(46)	31	(47)	
2.	Did you try to cut down on drugs and found you were unable to do it?	23	(42)	23	(42)	27	(44)	22	(42)	
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	20	(40)	26	(44)	20	(40)	22	(42)	
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	16	36	24	(43)	23	(42)	30	(46)	
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	15	(35)	20	(40)	16	(37)	19	(39)	
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	35	(48)	44	(50)	39	(49)	32	(47)	

Table 3 (Continued)

					Rac	e			
	•	Bla	ck	Wh	ite	Hispa		Oth	
		N = 7		(N = 6,396)		(N = 4.083)		N =	
		% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes	(SD)
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	16	(37)	25	(43)	19	(39)	15	(36)
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	6	(25)	13	(33)	14	(34)	15	(36)
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	6	(24)	13	(34)	14	(35)	9	(29)
	TCU Drug Screen Score (0-9)	1.6	(2.4)	2.2	(2.9)	2.0	(2.7)	1.9	(2.7)
	TCU Drug Screen Drug Dependency (Score > = 3, 0-1; mean)	26	(44)	34	(47)	31	(46)	28	(45)

Table 4

TCU Drug Screen by Age Group

					Age	Group _			
		< 2		22-	29	30-		> 4	
	<u> </u>	N = 2 % Yes	(SD)	$\frac{\text{(N = 5)}}{\text{\% Yes}}$	(SD)	$\frac{\text{(N = 6)}}{\text{\% Yes}}$		$\frac{\text{(N = 4)}}{\text{\% Yes}}$	
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	29	(45)	27	(44)	33	(47)	29	(45)
2.	Did you try to cut down on drugs and found you were unable to do it?	18	(39)	20	(40)	29	(45)	25	(43)
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	23	(42)	20	(40)	25	(43)	20	(40)
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	21	(41)	18	(39)	23	(42)	18	(39)
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	18	(38)	15	(36)	19	(39)	15	(36)
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	36	(48)	36	(48)	42	(49)	38	(49)

Table 4 (Continued)

					Age	Group				
	-	< 2	1	22-29		30-:	39	> 4	0	
	<u>-</u>				(N = 2,142) $(N =$		(N = 5,076) $(N = 6,190)$			
		% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	20	(40)	20	(40)	22	(41)	18	(38)	
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	7	(26)	8	(27)	12	(32)	13	(33)	
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	8	(27)	8	(27)	11	(32)	13	(34)	
	TCU Drug Screen Score (0-9; Mean)	1.8	(2.5)	1.7	(2.5)	2.2	(2.8)	1.9	(2.7)	
	TCU Drug Screen Drug Dependency (Score > = 3, 0-1; mean)	29	(46)	27	(44)	33	(47)	28	(45)	

39

Table 5
TCU Drug Screen by Problem Drug

					Problen	n Drug				
		No (N = 8		Marijuana (N = 1,625)		Tranqu (N =			ohol 3,606)	
		% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	3	(18)	38	(49)	49	(50)	52	(50)	
2.	Did you try to cut down on drugs and found you were unable to do it?	. 4	(19)	29	(45)	36	(49)	35	(48)	
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	. 2	(15)	30	(46)	45	(50)	26	(44)	
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	. 2	(14)	25	(43)	38	(49)	34	(47)	
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	. 1	(11)	21	(41)	34	(48)	20	(40)	
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	. 6	(25)	55	(50)	71	(46)	63	(48)	

Table 5 (Continued)

					Problem	Drug			
		No	ne	Marij		Tranqu	ilizers	Alco	hol
		N = 8		(N = 1,625)		(N = 55)		N=3	
		% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes	(SD)
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	. 2	(13)	26	(44)	56	(50)	26	(44)
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	. 1	(9)	8	(27)	36	(49)	15	(35)
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	. 1	(10)	8	(27)	40	(49)	15	(36)
	TCU Drug Screen Score (0-9; Mean)	0	(1)	2.4	(2.3)	4.1	(3.1)	2.9	(2.6)
	TCU Drug Screen Drug Dependency (Score > = 3, 0-1; mean)	. 3	(16)	39	(49)	60	(49)	45	(50)

Table 5 (Continued)

		Coca (N = 3 % Yes		Hallucin (N = % Yes	<u>81)</u>	Problen Inhal (N = % Yes	ants	$\frac{\text{Stimu}}{\text{(N = } \\ \text{\% Yes}}$	407)	Opia (N = - % Yes	430)
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	62	(48)	63	(49)	56	(50)	60	(49)	75	(43)
2.	Did you try to cut down on drugs and found you were unable to do it?	57	(50)	40	(50)	40	(49)	41	(49)	67	(47)
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	57	(50)	46	(50)	44	(50)	57	(50)	70	(46)
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	42	(49)	53	(50)	47	(50)	41	(49)	55	(50)
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	44	(50)	40	(49)	45	(50)	42	(49)	53	(50)
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	79	(41)	88	(33)	76	(43)	79	(41)	85	(36)

Table 5 (Continued)

		$\frac{\text{Coca}}{\text{(N = 3)}}$ % Yes		Hallucii (N = % Yes		Problem Inhala (N = % Yes	ants	Stimu $\frac{(N = 4)^{2}}{\text{% Yes}}$		Opia $\frac{(N = 2)^{2}}{\text{% Yes}}$	
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?		(50)	52	(50)	53	(50)	53	(50)	70 Tes	(45)
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	. 21	(41)	22	(42)	35	(48)	26	(44)	82	(38)
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	. 20	(40)	26	(44)	35	(48)	27	(44)	81	(39)
, ***** <u>.</u>	TCU Drug Screen Score (0-9)	4.3	(2.8)	4.3	(2.7)	4.3	2.8	4.2	(2.8)	6.4	(2.6)
	TCU Drug Screen Drug Dependency (Score > = 3, 0-1; mean)	. 67	(47)	65	(48)	64	49	66	(47)	88	(32)

Table 6

TCU Drug Screen by Admitting Offense

				I	Admittii	ng Offens	e		
	- -	Hom (N =				Robbery $(N = 1,369)$		Ass: (N = 1	
		% Yes		% Yes	(SD)	% Yes	(SD)	% Yes	(SD)
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	20	(40)	22	(41)	32	(47)	29	(45)
2.	Did you try to cut down on drugs and found you were unable to do it?	16	(37)	16	(37)	24	(43)	22	(41)
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	13	(33)	12	(33)	24	(42)	17	(38)
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	18	(38)	14	(34)	23	(42)	21	(41)
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	11	(31)	8	(28)	19	(40)	13	(34)
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	25	(43)	26	(44)	37	(48)	35	(48)

Table 6 (Continued)

				A	Admittir	g Offens	e		
		Homi (N =		Sex $(N = 1,347)$		Robb	Robbery $N = 1,369$		ult ,420)
		% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes	(SD)
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	14	(34)	12	(32)	24	(42)	17	(38)
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	6	(24)	6	(24)	11	(31)	9	(28)
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	7	(26)	6	(24)	12	(33)	9	(28)
	TCU Drug Screen Score (0-9; Mean)	1.3	(2.3)	.2	(2.2)	2.1	(2.8)	1.7	(2.5)
	TCU Drug Screen Drug Dependency (Score > = 3, 0-1; mean)	20	(40)	19	(40)	33	(47)	26	(44)

Table 6 (Continued)

						Admitting	Offens	e			
		Burg (N = 2		Larc (N = 1	eny	Drug O (N ≈ 6	ffense		WI 1,069)	Vehicle (N =	e Theft 593)
		% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes	(SD)
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	31	(46)	22	(42)	33	(47)	41	(49)	25	(43)
2.	Did you try to cut down on drugs and found you were unable to do it?	25	(43)	20	(40)	28	(45)	27	(44)	21	(41)
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	23	(42)	19	(40)	28	(45)	17	(38)	18	(39)
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	22	(42)	17	(37)	21	(41)	28	(45)	17	(37)
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	19	(39)	15	(36)	20	(40)	14	(34)	16	(37)
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	38	(49)	31	(46)	45	(50)	54	(50)	35	(48)

Table 6 (Continued)

			1	I ama		Admitting			.7 T	Vehicle	Theft
		Burg $(N = 2)$		Larceny $(N = 1,225)$		Drug Offense $(N = 6,484)$		DWI (N = 1,069)		$N = \frac{1}{2}$	
		% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes	(SD)	% Yes	(SD)
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	24	(43)	17	(37)	23	(42)	16	(36)	17	(38)
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	12	(33)	11	(31)	12	(32)	11	(32)	10	(30)
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	. 12	(32)	11	(31)	12	(33)	11	(31)	11	(32)
	TCU Drug Screen Score (0-9; Mean)	2.1	(2.8)	1.6	(2.7)	2.2	(2.7)	2.2	(2.4)	1.7	(2.6)
	TCU Drug Screen Drug Dependency (Score > = 3, 0-1; mean)	. 32	(47)	24	(43)	34	(48)	34	(47)	25	(43)



TCU Drug Screen Facility Type: Institutional Division (ID) and State Jail Division (SJD)

Table 7

			Facility		
		II		SJI	
	_	(N = 1)		N = 4	
		% Yes	(SD)	% Yes	<u>(SD)</u>
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	28	(45)	34	(47)
2.	Did you try to cut down on drugs and found you were unable to do it?	. 22	(42)	29	(45)
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	19	(39)	31	(46)
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	. 19	(39)	23	(42)
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	15	(36)	22	(42)
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	. 36	(48)	46	(50)
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	18	(39)	25	(44)
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	10	(30)	13	(33)
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	. 10	(30)	13	(34)
	TCU Drug Screen Score (0-9; Mean)	1.8	(2.6)	2.4	2.
	TCU Drug Screen Drug Dependency (Score > = 3, 0-1; mean)	28	(45)	36	48



TCU Drug Screen Items-Total Correlations.

		Total Sam Item total
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	69
2.	Did you try to cut down on drugs and found you were unable to do it?	65
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	70
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	68
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	69
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	65
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	70
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	60
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	58
	Coefficient Alpha Reliability:	
	Raw Variables	89
	Standardized Variables	90



TCU Drug Screen by Gender Item-Total Correlation

		Ger	nder
		Female $(N = 2,548)$	Male (N = 15,816)
		Item-total r	Item-total r
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	.71	.69
2.	Did you try to cut down on drugs and found you were unable to do it?	.66	.64
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	.74	.69
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	.68	.67
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	.71	.68
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	.66	.65
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	.69	.70
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	.59	.60
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	.58	.58
	Coefficient Alpha Reliability:		
	Raw Variables	.90	.89
	Standardized Variables	.90	.90

Table 10

TCU Drug Screen Item-Total Correlation by Race

	- -	Black $(N = 7,831)$ Item-total r	Race White $(N = 6,396)$ Item-total r	Hispanic $(N = 4,083)$ Item-total r
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	68	.73	.65
2.	Did you try to cut down on drugs and found you were unable to do it?	64	.69	.62
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	66	.76	.68
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	64	.71	.66
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	65	.72	.67
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	63	.67	.63
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	66	.73	.69
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	50	.65	.65
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	47	.63	.64
	Coefficient Alpha Reliability:			
	Raw Variables		.91	.89
	Standardized Variables	87	.91	.89

KK17 (7/24/02)



TCU Drug Screen Item-Total Correlation by Age Group

			Age Group				
	- -	≤ 21 (N = 2,142) Item-total r	22-29 (N = 5,076) Item-total r	30-39 (N = 6,190) Item-total r			
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?		.69	.71	.68		
2.	Did you try to cut down on drugs and found you were unable to do it?	.58	.66	.66	.64		
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	.65	.70	.72	.71		
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	.64	.68	.68	.67		
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	.63	.68	.70	.69		
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	.65	.65	.66	.63		

Table 11 (Continued)

		Age Group					
		≤ 21 (N = 2,142)	22-29 (N = 5,076)	30-39 (N = 6,190)	\geq 40 (N = 4,956)		
	-	Item-total r	Item-total r	Item-total r	Item-total r		
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	.63	.70	.71	.71		
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	.51	.57	.59	.67		
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	.51	.56	.57	.65		
	Coefficient Alpha Reliability:						
	Raw Variables	.87	.89	.90	.90		
	Standardized Variables	.87	.89	.90	.90		

Table 12

TCU Drug Screen Item-Total Correlation by Primary Problem Drug

			Proble	em Drug	
	·	None $(N = 8,894)$	Marijuana (N = 1,625)	Tranquilizers (N = 55)	Alcohol $(N = 3,606)$
		Îtem-total r	Item-total r	Item-total r	Item-total r
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	.45	.52	.59	.50
2.	Did you try to cut down on drugs and found you were unable to do it?	.38	.48	.44	.52
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	.46	.50	.65	.61
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	.48	.50	.67	.56
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	.46	.55	.63	.58
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	.39	.43	.53	.47

Table 12 (Continued)

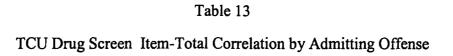
		Problem Drug				
		None $(N = 8,894)$ Item-total r	Marijuana $(N = 1,625)$ Item-total r	Tranquilizers $(N = 55)$ Item-total r	Alcohol $(N = 3,606)$ Item-total r	
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	.44	.50	.76	.58	
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	.43	.45	.60	.56	
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	.44	.39 ˜	.63	.54	
	Coefficient Alpha Reliability:					
	Raw Variables	.73	.79	.87	.83	
	Standardized Variables	.77	.79	.87	.84	

Table 12 (Continued)

,				Problem Drug		
		Cocaine $(N = 3,211)$	Hallucinogens $(N = 81)$	Inhalants $(N = 55)$	Stimulants $(N = 407)$	Opiates $(N = 430)$
		Item-total r	Item-total r	Item-total r	Item-total r	Item-total r
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	.57	.55	.68	.56	.56
2.	Did you try to cut down on drugs and found you were unable to do it?	.49	.41	.45	.62	.52
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	.56	.49	.54	.57	.66
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	.61	.55	.49	.59	.56
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	.62	.55	.56	.61	.56
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	.41	.40	50	20	
	or modern bronding:	.41	.40	.52	.38	.45

Table 12 (Continued)

		Problem Drug Cocaine Hallucinogens Inhalants Stimulants Opiate				
	·	(N = 3,211) Item-total r	$\frac{(N = 81)}{\text{Item-total } r}$	$\frac{(N = 55)}{\text{Item-total } r}$	$\frac{(N = 407)}{\text{Item-total } r}$	$\frac{\text{(N = 430)}}{\text{Item-total } r}$
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	.60	.64	.56	.59	.57
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	.52	.55	.46	.53	.61
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	.49	.52	.52	.54	.58
	Coefficient Alpha Reliability:					
	Raw Variables	.83	.82	.83	.84	.84
	Standardized Variables	.83	.82	.83	.84	.85



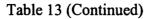
			Admitting Offense				
		Homicide $(N = 632)$	Sex $(N = 1,347)$	Robbery (N = 1,369)	Assault $(N = 1,420)$		
		Item-total r	Item-total r	Item-total r	Item-total r		
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	.69	.67	.72	.69		
2.	Did you try to cut down on drugs and found you were unable to do it?	.62	.62	.67	.64		
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	.70	.68	.73	.73		
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	.68	.69	.73	.68		
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	.68	.67	.70	.67		
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	.72	.66	.70	.66		

Table 13 (Continued)

		Admitting Offense				
		Homicide $(N = 632)$	Sex (N = 1,347)	Robbery (N = 1,369)	Assault $(N = 1.420)$	
		Item-total r	Îtem-total r	Item-total r	Item-total r	
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	.70	.66	.74	.71	
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	.57	.60	.59	.60	
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	.59	.57 *	.60	.61	
	Coefficient Alpha Reliability:					
	Raw Variables	.89	.88	.91	.89	
	Standardized Variables	.90	.89	.91	.90	

Table 13 (Continued)

		Admitting Offense					
		Burglary $(N = 2,412)$	Larceny $(N = 1,225)$	Drug Offense $(N = 6,484)$	DWI (N = 1,069)	Vehicle Theft (N = 593)	
		Item-total r	Item-total r	Item-total r	Item-total r	Item-total r	
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	.72	.73	.68	.55	.74	
2.	Did you try to cut down on drugs and found you were unable to do it?	.68	.70	.64	.55	.61	
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	.75	.78	.68	.62	.71	
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	.71	.74	.65	.58	.73	
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	.73	.75	.66	.60	.75	
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health						
	or medical problems?	.70	.69	.61	.53	.64	



·		Admitting Offense					
	·	Burglary $(N = 2,412)$	Larceny $(N = 1,225)$	Drug Öffense $(N = 6,484)$	DWI (N = 1,069)	Vehicle Theft (N = 593)	
		Item-total r	Item-total r	Item-total r	Item-total r	Item-total r	
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	.73	.76	.68	.58	.70	
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	.63	.65	.58	.58	.67	
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	.61	.62	.56	.55	.68	
	Coefficient Alpha Reliability:						
	Raw Variables	.91	.92	.88	.85	.91	
	Standardized Variables	.91	.92	.89	.85	.91	

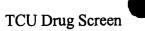


Table 14 TCU Drug Screen Item-Total Correlation by Facility Type: Institutional Division (ID) and State Jail Division (SJD)

		Facility	у Туре
		ID $(N = 13,902)$ Item-total r	SJD $(N = 4462)$ Item-total r
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	.69	.70
2.	Did you try to cut down on drugs and found you were unable to do it?	.65	.64
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	.71	.67
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	.67	.69
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	.68	.69
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	.65	.64
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	.70	.70
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	.60	.59
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	.58	.58
	Coefficient Alpha Reliability:		
	Raw Variables	.89	.89
	Standardized Variables	.90	.89

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Table 15

TCUDS Inter-Item Correlations for Questions 1 though 9 (N = 18,364)

Questions	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8_	<u>Q9</u>
Q1									
Q2	.57*								
Q3	.57*	.54*							
Q4	.52*	.48*	.52*				Sec.		
Q5	.50*	.48*	.57*	.58*					
Q6	.58*	.49*	.52*	.53*	.49*				
Q7	.55*	.49*	.57*	.51*	.56*	.50*			
Q8	.39*	.40*	.43*	.44*	.46*	.37*	.49*		
Q9	.38*	.39*	.43*	.43*	.44*	.37*	.47*	.74*	

^{*}p ≤ .01



TCU Drug Screen by Total Sample (N = 18,364)

		_	Total S	Sample
			Mean	(SD)
11.	How serious do you think your drug use p	problems are?	1.0	(1.3)
		(n = 10,139)		
	1 = Slightly15%	(n = 2,811)		
	2 = Moderately12%	(n = 2,189)		
	3 = Considerably9%	(n = 1,715)		
	4 = Extremely8%	(n = 1,510)		
12.	In the past 6 months before your last inca	rceration, how often did you inject drugs?	.3	(.9)
	0 = Never89%	(n = 16,374)		
	1 = A few times4%	(n=714)		
	2 = 1 to 3 times per month	(n = 199)		
	3 = 1 to 5 times per month2%	(n = 315)		
	4 = Daily4%	(n=762)		
13.	And how often did you share "works" widuring those months?	th someone else while injecting drugs	.1	(.5
	0 = Never95%	(n = 17,368)	••	(
		(n = 663)		
		(n = 78)		
	-	(n = 89)		
	4 = Daily< 1%	(n = 166)		

Table 16 (Continued)

		·	Total Sample	
			Mean	(SD)
•	How many times did you overdose on dru	igs in the last 6 months before your last incarceration?	.1	(.6)
	0 = Never95%	(n = 17,536)		
	1 = One time2%	(n = 398)		
	2 = 2 times1%	(n=195)		
	3 = 3 times< 1%	(n=74)		
	4 = 4 times< 1%	(n=24)		
	5 = 5 times< 1%	(n=23)		
	More than 5 times< 1%	(n = 114)		
5.	Before now, how many times have you be	een in a drug abuse treatment program?	.6	(1.2)
	0 = Never69%	(n = 12,745)		
	1 = One time17%	(n = 3,134)		
	2 = 2 times7%	(n = 1,248)		
	3 = 3 times3%	(n = 540)		
	4 = 4 times9%	(n = 168)		
	5 = 5 times5%	(n = 98)		
	More than 5 times2%	(n=431)		
6.	Have you ever gone to self-help meetings			
	0 = No58%	(n = 10,621)	.42	(.4
	1 = Yes42%	(n = 7,743)		-

•		_	Total Sample	
	<u> </u>		Mean	(SD)
6a.	Altogether, about how many meetings ha	ve you attended?	2.2	(1.4)
	0 = 1-520%	(n = 1,522)		
	1 = 6-1013%	(n = 1,033)		
	2 = 11-2520%	(n = 1,539)		
	3 = 26-10025%	(n = 1,946)		
	4 = Over 10022%	(n = 1,704)		
l6b.	How often did you find the meetings to be	e helpful?	2.5	(1.3)
	0 =Never10%	(n=754)		
	1 = Rarely10%	(n = 782)		
	2 = Sometimes28%	(n = 2,135)		
	3 = Often24%	(n = 1,838)		
	4 = Always29%	(n = 2,235)		
17.	How likely is it that you will use drugs re	gularly after you get out of prison?	.3	(.7)
	0 = Not at all82%	(n = 15,058)		
	1 = Slightly12%	(n = 2,252)		
	2 = Moderately3%	(n=517)		
	3 = Considerably2%	(n = 292)		
	4 = Extremely	(n=245)		
18.	How important do you think it is for you	to get drug treatment?	1.0	(1.4)
	0 = Not at all61%	(n = 11,320)		
	1 = Slightly12%	(n = 2,212)		
	2 = Moderately7%	(n = 1,336)		
	3 = Considerably7%	(n = 1,289)		
	4 = Extremely12%	(n = 2,207)		

Table 17

TCU Drug Screen by Return Within One Year (N = 4,685)

	-		Return (n = 684)		Return
	_	(n = % Yes	% No	$\frac{\text{(n = 1)}}{\text{\% Yes}}$	4,001) % No
1.	Did you often use larger amounts of drugs (including alcohol) or use them for a longer time than you had planned or intended?	35	65	30	70
2.	Did you try to cut down on drugs and found you were unable to do it?	27	73	25	75
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	27	73	23	77
4.	Did you often get so high or sick from drugs that it (a.) kept you from doing work, going to school, or caring for children? (b.) caused an accident or became a danger to you or others?	19	19 81		81
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	20	80	17	83
6.	In the last 6 months before your last incarceration, did your drug use often cause (a.) emotional or psychological problems? (b.) problems with family, friends, work, or police? (c.) physical health or medical problems?	41	59	39	61
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	20	80	20	80
8.	Did you keep taking a drug to avoid withdrawal or keep from getting sick?	10	90	10	90
9.	Did you get sick or have a withdrawal when you quit or missed taking a drug?	11	89	10	90
			ean (SD)	Mear	n (SD)
	TCU Drug Screen Score (0-9; Mean)	2.11	(2.6)	1.94	(2.64)
	TCU Drug Screen Drug Dependency (Score > =3, 0-1; mean)	.33	3 (.47)	.30	(.46)

APPENDIX

TCU DRUG SCREEN

Duri	ing the <u>last 6 months</u> before prison		
		Circle A	Answer
1.	Did you often use <u>larger amounts of drugs</u> (including alcohol) or use them <u>for a longer time</u> than you had planned or intended?	0=No	1=Yes
2.	Did you try to cut down on drugs and were unable to do it?	0=No	1=Yes
3.	Did you spend a lot of time getting drugs, using them, or recovering from their use?	0=No	1=Yes
4.	Did you often get so high or sick from drugs that it		
	a. kept you from doing work, going to school, or caring for children?	0=No	1=Yes
	b. caused an accident or became a danger to you or others?	0=No	1=Yes
5.	Did you often spend less time at work, school, or with friends so that you could use drugs?	0=No	1=Yes
6.	In the last 6 months before prison, did your drug use often cause		
	 a. emotional or psychological problems? b. problems with family, friends, work, or police? c. physical health or medical problems? 	0=No	1=Yes 1=Yes 1=Yes
7.	Did you increase the amount of a drug you were taking so that you could get the same effects as before?	0=No	1=Yes
8.	Did you ever keep taking a drug to avoid withdrawal or keep from getting sick?	0=No	1=Yes
9.	Did you get sick or have withdrawal when you quit or missed taking a drug?	0=No	1=Yes
10.	Which drugs caused you the MOST serious problems in the last 6 months before prison? [SEE LIST BELOW]	Vorst:	 DRUG #
	<u>N</u>	<u>lext</u> :	 DRUG #
	<u>N</u>	<u>[ext</u> :	 DRUG #
	CHOOSE "DRUG #s" FROM THIS LIST:		
	0. None3. Marijuana6. Tranquilizers of the control of the cont	r sedatives	

. 11	How serious do you think your <u>drug use problems</u> are?
11.	
	0. Not at all 1. Slightly 2. Moderately 3. Considerably 4. Extremely
12.	In the last 6 months before your last incarceration, how often did you inject drugs by using a needle or a syringe?
	0. Never 1. A few times 2. 1-3 times 3. 1-5 times 4. Daily per month
13.	And how often did you share "works" (needle, cotton, cooker, or rinse water) with someone else while injecting drugs during those months?
	0. Never 1. A few times 2. 1-3 times 3. 1-5 times 4. Daily per month
14.	How many times did you overdose on drugs in the last 6 months before your last incarceration?
	0. Never 1. 1 time 2. 2 times 3. 3 times 4. 4 times 5. 5 times 6. More than 5 times
15.	Before now, how many times have you been in a drug abuse treatment program? (DO NOT INCLUDE TREATMENTS THAT WERE ONLY FOR ALCOHOL OR TIMES YOU WENT TO MEETINGS OF AA, NA, CA, ETC.)
	0. Never 1. 1 time 2. 2 times 3. 3 times 4. 4 times 5. 5 times 6. More than 5 times
) 16.	. Have you ever gone to self-help meetings for drug addiction, like NA, CA, etc?
	0. No 1. Yes
	IF "YES", ASK:
	a. Altogether, about how many meetings have you attended? Was it
•	0. 1-5 1. 6-10 2. 11-25 3. 26-100 4. over 100
	b. How often did you find the meetings to be <u>helpful</u> ?
	0. Never 1. Rarely 2. Sometimes 3. Often 4. Always
17.	. How likely is it that you will use drugs regularly after you get out of prison?
	0. Not at all 1. Slightly 2. Moderately 3. Considerably 4. Extremely
18	. How important do you think it is for you to get drug treatment?
	0. Not at all 1. Slightly 2. Moderately 3. Considerably 4. Extremely
	·
,	

Scoring for the TCU Drug Dependence Screen

Page 1 of the TCU Drug Dependence Screen is scored as follows:

- 1. Give 1-point to each "yes" response to 1-9 (Questions 4 and 6 are worth one point each if a respondent answers "yes" to any portion).
- 2. The total score can range from 0 to 9; score values of 3 or greater indicate relatively severe drug-related problems, and correspond approximately to DSM drug dependence diagnosis.
- 3. Responses to Question 10 indicate which drug (or drugs) the respondent feels is primarily responsible for his or her drug-related problems.

There have been no composite score protocols developed for Items 11-15 on Page 2.

TDCJ TCUDS (1/15/98)

TCU Drug Screen II

Instruction Page

The following questions ask about your drug use (including alcohol) in the past 12 months. Please answer them by marking only one circle for each question. If you do not feel comfortable giving an answer to a particular question, you may skip it and move on to the next question.

If you are an inmate, please refer to the 12-month period immediately before you were locked up; that is, the last time you were in the "free world."

Also, alcohol is a drug. Your answers to questions about drug use need to include alcohol use, such as drinking beer.

The example below shows how to mark the circles --

	Yes No
1. I like ice cream	O •

TCU DRUG SCREEN II

Duri							
	<u></u>			ocked up, if applicable) –		Yes	No
1.	Did you than you	use <u>larger a</u> ı had planne	mounts of drugs or d or intended?	r use them <u>for a longer tim</u>	<u>e</u> 	. 0	0
2.	Did you	try to cut do	own on your drug t	<u>use</u> but were <u>unable</u> to do i	t?	. 0	0
3.	Did you or recov	spend a lot ering from t	of time getting dru heir use?	gs, using them,		. 0	0
4.	Did you						
	a.	. 0	0				
	b.	. 0	0				
5.	Did you so that y	. 0	0				
6.	Did you	ır drug use <u>c</u>	ause –				
a. emotional or psychological problems?							0
b. problems with family, friends, work, or police?						. 0	0
	c. physical health or medical problems?						0
7.	7. Did you increase the amount of a drug you were taking so that you could get the same effects as before?						0
8.	Did you or keep	ever keep to from getting	aking a drug to <u>avo</u> g sick?	oid withdrawal	•••••	. 0	0
9.	Did you you qui	get sick or t or missed t	have withdrawal waking a drug?	hen		. 0	0
10.	Which g	drugs caused	l you the MOST se	rious problems? [SEE LIST	BELOW]		
	a.	Worst	O None O Alcohol O Inhalants	O Marijuana O Cocaine or crack O Other stimulants	O Tranquil O Hallucin O Opiates		edatives
	b	Next	O None O Alcohol O Inhalants	O Marijuana O Cocaine or crack O Other stimulants	O Tranquil O Hallucin O Opiates		edatives
	c.	Next	O None O Alcohol O Inhalants	O Marijuana O Cocaine or crack O Other stimulants	O Tranquil O Hallucin O Opiates		edatives

 How often did you use each type of drug 		DRUG US	E IN LAST	<u> 12 monti</u>	<u>IS</u>			
during the last 12 months?		ONLY	1-3	1-5	ABOUT			
		A FEW	TIMES A	TIMES A	EVERY			
	NEVER	TIMES	MONTH	WEEK	DAY			
a. Alcohol	0	0	0	0	0			
b. Marijuana/Hashish	0	0	0	0	0			
c. <u>Hallucinogens</u> /LSD/Psychedelics/PCP/ Mushrooms/Peyote	0	0	0	0	0			
d. Crack/Freebase	0	0	0	0	0			
e. Heroin and Cocaine (mixed together as speedball)	0	0	0	0	0			
f. Cocaine (by itself)	0	0	0	0	0			
g. Heroin (by itself)	0	0	0	0	0			
h. Street Methadone (non-prescription)	0	0	0	0	0			
i. Other Opiates/Opium/Morphine/Demerol	0	0	0	0	0			
j. Methamphetamine/Speed/Ice (Uppers)	0	0	0	0	0			
k. <u>Tranquilizers</u> /Barbiturates/Sedatives (Downers)	0	. 0	0	0	0			
1. Other (specify)	0	0	0	0	0			
12. In the 12 month, how often did you <u>inject drugs</u> with a needle? O Never O Only a O 1-3 times O 1-5 times O Daily few times per month per week								
13. How serious do you think your <u>drug problems</u> are?		p 3. 7.00						

O Moderately

O Moderately

O 3 times

14. How many times before now have you ever been in a drug treatment program?

O 2 times

O Considerably

O Considerably

O 4 or more times

O Extremely

O Extremely

TCU FORMS/TCUDS/TCUDS2 (2/6/01)

O Not at all

O Never

O Not at all

1

O Slightly

[DO NOT INCLUDE AA/NA/CA MEETINGS]

O 1 time

15. How important is it for you to get drug treatment now?

O Slightly

Scoring for the TCU Drug Screen II

Page 1 of the TCU Drug Screen is scored as follows:

- 1. Give 1-point to each "yes" response to 1-9 (Questions 4 and 6 are worth one point each if a respondent answers "yes" to any portion).
- 2. The total score can range from 0 to 9; score values of 3 or greater indicate relatively severe drug-related problems, and correspond approximately to DSM drug dependence diagnosis.
- 3. Responses to Question 10 indicate which drug (or drugs) the respondent feels is primarily responsible for his or her drug-related problems.

TCU FORMS/TCUDS/TCUDS2 (2/6/01)

TCU Drug Screen Products (Bibliography):

Publications

Knight, K., Simpson, D. D., & Hiller, M. L. (2002). Screening and referral for substance-abuse treatment in the criminal justice system. In C. G. Leukefeld, F. M. Tims, & D. Farabee (Eds.), <u>Treatment of drug offenders: Policies and issues</u> (pp. 259-272). New York: Springer.

Presentations

Knight, K. (2001, April). <u>The TCU Drug Screen</u>. Invited presentation at the annual meeting of the Academy of Criminal Justice Sciences (ACJS), Washington, DC.

Knight, K., Hiller, M. L., & Simpson, D. D. (2000, November). Screening offenders for intensive treatment: The role of recidivism risk and drug use severity. Paper to be presented at the annual meeting of the American Society of Criminology (ASC), San Francisco, CA.

Knight, K. (1999, April). Enhancing the California Department of Corrections Screen for Drug Problems. Invited presentation at the Custodial Classification and Clinical Assessment: Bridging the Gap meeting, sponsored by the San Diego Addiction Technology Transfer Center and the Center, San Diego, CA.

Knight, K., & Hiller, M. L. (2000, February). <u>Corrections-based treatment: Screening, process, and outcomes</u>. Invited workshop presented at the Texas Commission on Alcohol and Drug Abuse (TCADA) Best Practices IV Conference, Austin, TX.

Knight, K., Hiller, M. L., Broome, K. M., & Simpson, D. D. (1999, November). <u>An evaluation of the TCU Drug Screen</u>. Paper presented at the annual meeting of the American Society of Criminology (ASC), Toronto, Ontario, Canada.

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