



Gender Differences at Admission in Health, Trauma, and HIV/Hepatitis Risk in a Sample of Incarcerated Substance Abusers



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Abstract

Systematic and efficient data collection in high-volume offender drug-using populations is particularly important due to the growing need for correctional systems to provide treatment services.

The Institute of Behavioral Research (IBR) at TCU has developed a series of 1-page assessment forms that offer flexibility in diagnostic screening of selective needs/risks. While previous studies of needs/risk have focused on motivation, psychosocial functioning, criminal thinking, and engagement, few have addressed health issues (mental and physical), post-traumatic stress disorder, and HIV/Hepatitis risk patterns, particularly with respect to gender differences. This study was based on 2882 male and female substance abusers participating in 8 prison-based treatment programs located in two states.

Assessments included the TCU Health form (11 items about types of physical disease or health problems experienced in the past year, and 10 items on symptoms of psychological distress during the past 30 days), the TCU Trauma form (17 symptom-severity items representing post-traumatic stress disorder), and the TCU HIV/Hepatitis Risk Assessment (19 items focused on risks associated with injection drug use, sexual activities, HIV attitudes, and condom related attitudes).

Results indicated female offenders reported more post traumatic stress symptoms, higher rates of psychological stress, and more health issues at admission. In addition, HIV scales indicated females reporting overall higher needle and sex risks, but no gender differences in HIV attitudes.

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Background

- The TCU Model for Treatment Process (Figure 1) provides a conceptual framework that guides use of assessments of needs and functioning as clients enter and progress through treatment.
- IBR at TCU recently developed a series of 1-page assessment forms designed as a customized battery or to augment existing assessment batteries of clinical needs and progress monitoring tools.
- Gender differences have been documented in patterns of drug use and psychological functioning at treatment entry, on retention rates, and on outcomes among substance abusers.
- Fewer gender studies have focused on clinically relevant areas such as health (mental and physical), post-traumatic stress symptoms, and HIV/Hepatitis risk patterns among substance abusing offenders entering treatment.

Background

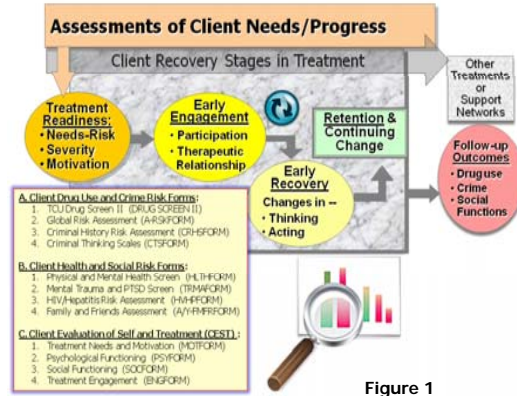


Figure 1

Research Questions

- Are 1-page screening assessments given at admission sensitive to health issues (mental and physical), trauma (post traumatic stress symptoms) and HIV/Hepatitis in an offender population?
- Are these instruments psychometrically sound?
- Are these screening instrument composites sensitive to gender differences in these offender populations?

Methods

- Offenders (N=2882) from 8 CJ facilities located in two states completed the TCU Health, TCU Trauma and the TCU HIV/Hepatitis Risk Assessment as part of a larger intake battery of TCU assessments.
- Confirmatory factor analysis was used to verify composites for each form.
- Analysis of variance was used to examine gender differences among a matched set of offenders.

Sample

	Females (n=1287)	Males (n=1595)
% Hispanic	22%	25%
% White *	56%	40%
% HS grad	57%	61%
% Married	25%	24%
% Employed *	40%	52%
Age (mean) *	33.2 (9.9)	35.2 (10.4)

* < .05

Scales

Trauma Scales	Means	S.D.	Scale Alpha
Re-experiencing (5 items)	.48	.49	.89
Avoidance (7 items)	.31	.46	.80
Hyperarousal (5 items)	.43	.49	.75
PCL Total Score	37.0	15.3	.94
PCL Cutoff (>43)	.22	.41	na

Sample Items from Each Scale (1 = Not at all; 5 = Extremely)

Re-experiencing*: Repeated, disturbing dreams of a stressful experience? Feeling very upset when something reminded you of a stressful experience? Having physical reactions (trouble breathing, sweating) when reminded of stressful experience?

Avoidance*: Feeling distant or cut off from other people?

Trouble remembering important parts of a stressful experience?

Avoiding activities or situations because they reminded you of a stressful experience?

Hyperarousal*: Trouble falling asleep or staying asleep?

Being "super-alert" or watchful or on guard?

[*Based on DSM-IV Clusters B,C,D]

Health Scales

Health Scales	Means	S.D.	Scale Alpha
Physical Health (index)	14.6	5.1	na
K10 Score	21.1	8.9	.92
K10 Cutoff Score (>30)	.32	.46	na

Sample Items from Each Scale (1 = None of the time; 5 = All of the time)

Physical health items: Stomach problems or ulcers; bone/joint problems; kidney infections; bladder infections; liver or gall bladder problems; intestinal or bowel problems; heart disease; sexually transmitted disease (STD); skin disease; and other medical or physical problems.

Psychological Health (K10): During the past 30 days, how often did you feel -- tired for no good reason?; nervous?; so nervous that nothing could calm you down?; hopeless, restless or fidgety?; so restless that you could not sit still?; depressed?; so depressed that nothing could cheer you up?; that everything was an effort?; worthless?

HIV/Hepatitis Scales

HIV/Hepatitis Scales	Means	S.D.	Scale Alpha
Injection Risk (5 items)	1.28	.70	.89
Sex Risk (4 items)	1.82	.92	.80
Condom Attitudes (4 items)	2.79	1.0	.82
AIDS Concerns (4 items)	2.90	1.0	.76

Sample Items - Times (1 = Never; 2 = 1-2; 3 = 3-9; 4 = 10-29; 5 = Over 30)

Injection Risk: How many times did you inject drugs with a needle?

How many times did you use dirty needles or cooking works (not cleaned with bleach)?

Sex Risk: How many times did you have sex while you were high on drugs? How many times did you have sex and did not use a condom?

Sample Items - Attitudes (1 = Disagree Strongly; 5 = Agree Strongly)

Condom Attitudes: Condoms interrupt the mood when having sex.

It feels unnatural to use a condom when having sex.

AIDS Concern: It is possible that you could get AIDS or hepatitis.

There are things you want to change to help avoid getting AIDS or hepatitis.

Results

	Females (n=1287)	Males (n=1595)	F (1,2880)
Trauma Form			
Re-experiencing	.55	.38	88.37****
Avoidance	.35	.26	28.14****
Hyperarousal	.44	.37	15.85****
PCL Total Score	38.3	34.0	56.86****
PCL Cutoff (> 43)	.24	.17	23.68****
Health Form			
Physical Health	15.0	13.8	40.04****
K10 Score	22.2	19.2	79.21****
K10 Cutoff (> 30)	.35	.25	33.57****
HIV/Hepatitis			
Injection Risk	1.3	1.2	10.38**
Sex Risk	1.9	1.8	6.27*
Condom Attitudes	2.6	2.9	71.46****
AIDS Concerns	2.9	2.9	n.s.

(* < .05, ** < .01, *** < .001, **** < .0001)

Summary

A major factor in achieving favorable treatment engagement and outcomes is the use of effective screening and assessment instruments. This study describes the psychometric properties and structure of three 1-page assessments which address health issues (mental and physical), post-traumatic stress symptoms, and HIV/Hepatitis risk patterns in a sample of criminal justice offenders.

The results indicated that female offenders reported significantly more post traumatic stress symptoms and higher rates of both physical health problems and psychological stress at admission compared to males. In addition, HIV/hepatitis scales indicated females reported overall higher needle and sex risks, but there were no gender differences in HIV concern. Male offenders also reported significantly higher scores on the condom attitudes scale (indicating more negative attitudes toward condom use). In conclusion, the special needs of women offenders including trauma symptoms and mental and physical health issues need to be considered in planning for their treatment in the criminal justice system.