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THE PERSONAL EXPERIENCE INVENTORY:

AN ASSESSMENT OF THE INSTRUMENT'S VALIDITY

AMONG A DELINQUENT POPULATION IN WASHINGTON STATE

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I. INTRODUCTION

Treatment of adolescents with substance abuse problems is a relatively new clinical area. Validated instruments for assessing the level and nature of substance abuse are needed to facilitate effective case planning. The Personal Experience Inventory (PEI), developed in Minnesota by the Chemical Dependency Adolescent Assessment Project, is one such instrument (Winters and Henly, 1988).

An additional challenge to substance abuse treatment is the complex problem of working with juvenile offenders. A preliminary question remains before case planning can be performed on this population: are assessment instruments, validated with a clinical treatment population, also valid with a chronic delinquent population? This paper describes the results of a study to validate the PEI with a study population of chronic delinquent adolescents institutionalized in the state of Washington.

II. SUBSTANCE ABUSE ASSESSMENT IN WASHINGTON STATE

In 1983, the Washington State Division of Juvenile Rehabilitation (DJR) conducted a study of the extent of substance abuse among the juvenile offender population in the state of Washington's juvenile corrections programs. In preparing for that study, a work group examined a wide variety of psychometric instruments used to determine the level of dysfunction among substance abusing clients. The Michigan Alcoholism Screening Test, the Jellinek, the Youth Jellinek, the University of Washington Test, the Everett Youth Test, the Moritmer/Filkens, the Adolescent Alcohol Involvement Scale, the Drug Abuse Treatment and Referral System, and the Client Substance Index were each reviewed. The Client Substance Index (CSI) was chosen by the work group as the instrument best suited to assess the problems of a young, poly-drug abusing population.

The CSI produces a scale which indicates the client's level of involvement with substances: non-use, misuse, abuse or chemical dependency. The initial use of the CSI included the corresponding administration of the California Personality Inventory, which provided defensiveness and locus of control scales. In these initial studies, the Division of Juvenile Rehabilitation (DJR) determined that 67% of its client population was chemically dependent, and another 20% were serious substance abusers.

On the strength of this research, and additional research findings in the literature, the DJR developed a wide range of services to the substance abusing, chronic delinquent client. The CSI continued to play a major role in the development of

programming. DJR policy required every client committed to the Division to be assessed using the CSI.

The developer of the CSI was eventually asked to modify and enhance the instrument to provide more complete, clinically valuable information to rehabilitation staff. Changes included the addition of: 1) six sub-scales, indicating the nature of impairment for the individual taking the test, 2) defensiveness and locus of control scales built into the instrument, and 3) a refined chemical dependency scale, indicating early, middle, or late stage addiction.

An effective method of assessing the extent of problems associated with drug involvement is essential to the development of all social service programs. The introduction of the CSI into DJR treatment planning serves as an excellent example. DJR programs in education, referral, treatment, and aftercare all responded to the new data describing the extent of chemical dependency among the client population. Individualized treatment planning, specific to substance abuse, was improved as clinicians utilized the assessments now available for every client. Even though substance abuse treatment was a new and confusing area for juvenile justice personnel, the assessment capacity provided by the CSI helped to improve staff awareness and expertise. Staff's tendency to deny the extent of substance abuse issues with clients was substantially diminished by the constant exposure of staff to the results of the CSI.

However, treatment staff began to express concerns about the CSI. As experience and expertise improved among treatment staff, inconsistencies in sub-scale profiles were increasingly noted. Additionally, a large proportion (approximately 50%) of clients failed the defensiveness scales (i.e., were "faking good" according the CSI results). While this proportion might have been conceivable given the type of client, several of the clients scored as "faking good" actually scored very high on the substance abuse scales. The defensiveness scores generally seemed unrelated to the youth's actual behavior. Staff eventually chose to assess the validity of an individual's scores based on their personal contact with the youth, and to simply ignore the defensiveness scale.

The DJR research staff began a review of the CSI in 1985 to address these concerns. A factor analysis, which is a statistical technique for identifying clusters of items related to a single underlying dimension, was used to assess the responses in 641 CSI results from the previous year. The results indicated that there was a single primary factor (substance abuse involvement) underlying virtually every item on the test. This finding is useful in that it supports the reliability of the overall chemical dependency score produced by the instrument. However, the complexity of adolescent substance abuse, and the

treatment needs of the delinquent adolescent, necessitate the availability of subscales describing different dimensions of chemical dependency--a characteristic sorely lacking on the CSI.

III. THE <u>PERSONAL EXPERIENCE INVENTORY</u> (PEI)

At the same time, the Chemical Dependency Adolescent Assessment Project (CDAAP), under the direction of Dr. Ken Winters, released preliminary findings that identified a central issue in the assessment of adolescent substance abuse: most assessment instruments are based on an adult theoretical construct of chemical dependency. The project authors concluded that there was a need for instruments to identify the multi-dimensional problems among chemically dependent adolescents. The project proposed an assessment battery that addressed three dimensions related to diagnosing adolescent chemical dependency: 1) problem severity, 2) "risk factors" that "may predispose and perpetuate chemical involvement", and 3) "variables associated with diagnostic classification of substance use disorders", particularly variables consistent with DSM-III-R criteria. The PEI, an empirically-developed multi-scale inventory (Henly and Winters, in press) addresses the first and dimensions.

DJR contacted the CDAAP, and eventually entered into an agreement to assist in the validation work for the PEI. DJR offered an offender population for the study, while the CDAAP provided the instruments and scoring at no cost. Funding for the study (i.e., costs of the clinical assessments) was a joint effort of DJR and the Washington State Bureau of Alcohol and Substance Abuse.

IV. STUDY METHODOLOGY

A sample of 100 youths was selected from three DJR institutions: Echo Glen Children's Center, Green Hill School, and Maple Lane School. A complete set of data could not be obtained from a small number of the youths; therefore, the final sample size was 95. Of those, 29 were from Echo Glen, 32 were from Green Hill, and 34 were from Maple Lane.

The state of Washington's juvenile justice sentencing system mandates that only the most serious or most chronic offenders be committed to the state. Virtually all DJR clients, then, have either an extensive history of criminal offenses, or a serious, violent committing offense. Ages for DJR clients range from 13 to 20 (21 year olds are not permitted in the state's juvenile system), with an average age of approximately 16 years old.

Each youth was assessed by a local substance abuse assessment specialist. Youths from Echo Glen were assessed by Michael Kirkland, while youths from Green Hill and Maple Lane were

assessed by specialists from Campbell and Associates. The clinicians who worked in the study are each specialists in substance abuse assessment, and are certified in the state of Washington.

The clinicians were provided access to each of the study youths for a period of 90 minutes. The clinicians conducted a clinical interview, assessing the nature and impact of substance use/abuse in the client's life. Information about the youth's prior social history, <u>excluding</u> any indication of the youth's prior substance abuse, was provided to the clinicians.

A rating form, with items corresponding to the 22 subscales produced by the PEI, was developed as a guide for the clinicians. The form, which is included as attachment A, was carefully reviewed by DJR program staff, the clinical specialists, and the PEI developers--assuring that the form had at least face validity. The forms were then completed in full by the clinicians.

The PEI was administered to each of the youths in one of two ways: 1) a paper-and-pencil version, and 2) a computer version. The developers of the PEI requested that study subjects be randomly assigned to these conditions as part of their validation of the computer version. The test score sheets, and the floppy disk with computer responses, were then sent to Minnesota. The PEI developers scored the tests and returned complete subscale data.

Additional client information was collected from DJR records and added to the data set. Since the CSI is administered to each client upon admission to DJR, CSI subscale data were available for each client. The Carlson Psychological Scale is administered to most Green Hills youths, and was therefore available for 27 subjects in the sample. Information, such as the youth's age and sex, was also collected.

V. FINDINGS

The PEI subscales have been normed by its developers to a drug-clinic population (N=1300). The subscales scores are computed such that the average score is 50, and the standard deviation is 10 (i.e., 68% of all cases fall between 40 and 60). A score below 50 on a particular subscale indicates that the youth has less of a problem than a "typical" youth in the PEI drug-clinic standardization sample, while a score over 50 indicates the youth has more of a problem. Table 1 presents the average scores of DJR clients for the full set of PEI subscales.

Table 1: Average Scores of DJR Clients for PEI Subscales, Normed to a Drug-Clinic Population

PEI Subscales	Average Normed Score
Basic-Problem Severity	
Personal Involvement (Chemical Dependency)	56.0
Effects of Use	56.4
Social Benefits Use	55.2
Personal Consequences	58.9
Polydrug Use	58.1
Clinical-Problem Severity	
Preoccupation	54.5
Social Recreational Use	52.2
Psychological Benefits	55.2
Transsituational Use	56.6
Loss of Control	53.7
Personal Adjustment	
Personal Inadequacy	49.8
Psychological Disturbance	55.4
Social Isolation	52.7
Uncontrolled	54.1
Rejecting Convention	50.3
Deviant Behavior	65.8
Absence of Goals	48.9
Spiritual Isolation	50.4
Environmental Factors	
Peer Chemical Environment	51.8
Sibling Chemical Use	53.2
Family Pathology	55.4
Family Estrangement	48.3

The results in table 1 indicate that the DJR clients scored substantially higher than the norm (i.e., they had more of a problem) for most of the subscales. For most of the drug-related scales, and especially the deviant behavior subscale, the DJR population appeared to be considerably more dysfunctional than the drug-clinic norm. On the other hand, the DJR clients were approximately equal to the clinical population on several of the scales that were not specific to drug use, such as personal adequacy, future goal orientation, and spirituality. (These findings do not suggest that the DJR population was similar to a normal, or high school, population; only that they were similar to a clinical, and therefore potentially deviant, population on these subscales.)

Table 2 provides findings that evaluate the validity of the PEI against alternative measures. Relevant scales from the PEI, the CSI, and the Carlson Psychological Survey (CPS) were correlated with the clinical assessments of whether the youth was faking

good, whether the youth was faking bad, and the youth's level of chemical dependency.

Table 2: Correlations of PEI, CSI, and Carlson Psychological Survey Subscales With Clinician Assessment Ratings

| | Clinician Assessments | | |
| | | | Chemical Dependency |
Instrument Scale	Faking Good	Faking Bad	of Youth
PEI: Faking Good	.28*		
CSI: Faking Good	.04		
PEI: Faking Bad		.14	
CSI: Faking Bad		.08	
PEI: Personal Involvement			.60*
CSI: Chemical Dependency			.48*
CPS: Drug Abuser Profile			.15
CPS: Chemical Abuse			.37

*=p<.01

The results in table 2 indicate that select PEI subscales were more strongly correlated to the clinical assessments than similar subscales from the CSI and the CPS. In terms of predicting whether the client was "faking good" (which is a major concern when administering a test of this nature to an incarcerated population), the equivalent PEI subscale, an adaptation of the Marlowe-Crowne Social Desirability Scale, was significantly related to the clinical rating, while the CSI subscale was virtually unrelated. Neither instrument contained a "faking bad" subscale that was significantly correlated to the clinical assessment of faking bad. Actually, very few study subjects were assessed as faking bad on the instruments or by the clinicians. Both the PEI and CSI general chemical dependency subscales (unlike the Carlson chemical dependency scale) were significantly related to the clinicians' ratings. The PEI subscale's correlation to the clinical assessment was especially strong.

Table 3 examines the entire set of PEI subscales. The correlation of each PEI subscale is correlated to an equivalent rating prepared by the clinical specialists. The correlations, in effect, indicate how closely the PEI scales match the clinician's ratings.

Table 3: Correlations of PEI Subscales
with Clinician Assessment Ratings

PEI Subscales	Correlation with Clinician Assessment of Item
Basic-Problem Severity	
Personal Involvement (Chemical Dependency)	.48*
Effects of Use	.27*
Social Benefits Use	.18
Personal Consequences	.45*
Polydrug Use	.38*
Clinical-Problem Severity	
Preoccupation	.37*
Social Recreational Use	.40*
Psychological Benefits	Not Rated by Clinicians
Transsituational Use	Not Rated by Clinicians
Loss of Control	.04
Personal Adjustment	
Personal Inadequacy	.01
Psychological Disturbance	.06
Social Isolation	.03
Uncontrolled	.04
Rejecting Convention	.02
Deviant Behavior	Not Rated by Clinicians
Absence of Goals	.02
Spiritual Isolation	.37*
Environmental Factors	
Peer Chemical Environment	.26*
Sibling Chemical Use	.42*
Family Pathology	.10
Family Estrangement	.17

The results in table 3 indicate that almost all of the PEI chemical use problem severity subscales, and three of the other subscales, were significantly related to the clinician ratings. However, several of the non-chemical use scales were not correlated to their equivalent clinician ratings. Some of these subscales were based on only one item from the PEI questionnaire and may be less stable. Other subscales, especially uncontrolled behavior, were not evaluating exactly the same dimension as the clinical rating; the clinicians scored the youths in terms of their locus of control.

Theoretically, the PEI scales that measure "high risk" factors of chemical dependency should be related to chemical use problem severity. Table 4 presents the correlations of the PEI high risk subscales with the PEI chemical dependency score.

Table 4: Correlations of PEI High Risk Subscales with the PEI Personal Involvement Subscale

Personal Adjustment

Personal Inadequacy	.18*
Psychological Disturbance	.45*
Social Isolation	-.09
Uncontrolled	.45*
Rejecting Convention	.16
Deviant Behavior	.62*
Absence of Goals	.05
Spiritual Isolation	.13

Environmental Factors

Peer Chemical Environment	.50*
Sibling Chemical Use	.29*
Family Pathology	.32*
Family Estrangement	.21*

The results in table 4 indicate that the majority of the high risk subscales were significantly related to the PEI personal involvement subscale. The environmental factors, such as the youth's peer chemical environment, were especially likely to be related to the youth's involvement with chemicals.

VI. CONCLUSIONS

The results of this study suggest that the Personal Experience Inventory (PEI) can be a useful tool for the assessment of substance abuse among an offender population. Data were presented that indicated that the PEI substance abuse and defensiveness scores were significantly correlated to ratings by independent clinical specialists, and that the magnitude of the correlations was greater than the degree to which alternative measures, the CSI and the CPS, were correlated. In addition, several of the PEI subscales were also significantly correlated to ratings by the clinicians, providing evidence of convergent validity for these subscales. Finally, the PEI high risk subscales were strongly correlated with the general PEI chemical dependency score, indicating that these subscales appear to be measuring dimensions associated with chemical involvement.

Since this study was completed, DJR reached agreement with the CDAAP to use the PEI on an experimental basis in the Exodus Program, an intensive treatment cottage for chemically dependent offenders at Echo Glen. The publication rights of the PEI are with Western Psychological Services of California. It is recommended that DJR adopt the PEI for use with all DJR clients as the instrument is made available by the publisher.

DIVISION OF JUVENILE REHABILITATION
DRUG/ALCOHOL PROGRAM

CLINICAL ASSESSMENT RATING   CLIENT #_____

Please respond to each statement based on your clinical impressions of this client.

A. This client currently uses substances:
    1. rarely or not at all.
    2. infrequently.
    3. regularly (1 to 2 times a week).
    4. often (3 to 4 times a week).
    5. daily.

B. This client reports experiencing personal/internal negative effects (eg. depression, anxiety, paranoia, etc) from the use of substances:
    1. never.
    2. seldom.
    3. occasionally.
    4. often.

C. In the context of his/her social network this client:
    1. rarely uses substances.
    2. sometimes uses substances.
    3. regularly uses substances.
    4. socializes only in a drug using context.
    5. avoids social contact and isolates self with substances.

D. This client has experienced personal (negative) consequences as a result of substances:
    1. rarely or never.
    2. sometimes, but not of a serious nature.
    3. one or two of a serious nature.
    4. frequently.

E. This client:
    1. is not overly involved with substances and peers who use them.
    2. is becoming interested in substances and peers who use them.
    3. is changing friends and lifestyle to accommodate substances.
    4. is pre-occupied with substance use.

F. This client has experienced "blackouts":
    1. never.
    2. once.
    3. two or three times.
    4. more than three times.
    [If this client has experienced blackouts, would his/her attitude be characterized as "seriously concerned"?_____(Y/N)]

G. This client :
    1. has never or rarely used chemicals.
    2. has used chemicals, but maintains control over dosage and situation.
    3. has occasionally lost control over usage.
    4. frequently loses control over usage.

H. This client:
    1. does not use drugs or alcohol.
    2. uses only alcohol.
    3. uses alcohol and marijuana.
    4. uses alcohol and other drugs.

I. This client's sense of personal adequacy is:
    1. strong.
    2. generally positive.
    3. somewhat negative.
    4. poor.

J. Has this client experienced a psychological disturbance or been hospitalized or treated for a psychological problem (not drug/alcohol related)?
    1. no.
    2. yes.   (If yes, how many times?_____)

K. This client is bonded to school, friends, and family:
    1. in a positive and supportive manner.
    2. somewhat successfully.
    3. only marginally.
    4. not at all.

L. The locus of control of this client is:
    1. very internal.
    2. somewhat internal.
    3. somewhat external.
    4. very external.

M. This client:
    1. has very conventional values.
    2. has basically conventional values.
    3. has somewhat unconventional values.
    4. has values not considered conventional.

N. This client:
    1. often thinks about the future.
    2. sometimes thinks about the future.
    3. rarely thinks about the future.
    4. never thinks about the future.

O. This client:
   1. maintains a set of personal beliefs of a spiritual or religious nature.
   2. has some positive regard for spiritual or religious beliefs
   3. has not given much consideration to spirtual or religious matters.
   4. has no personal beliefs of a spirtual or religious nature.

P. This client has:
   1. no siblings who use chemicals.
   2. at least one sibling who uses chemicals occasionally.
   3. at least one sibling who uses chemicals often.
   4. at least one sibling who uses chemicals daily.

Q. This client's family is:
   1. very functional.
   2. somewhat functional.
   3. somewhat dysfunctional.
   4. very dysfunctional.

R. This client's parents (caretakers):
   1. never use substances.
   2. use alcohol socially.
   3. abuse drugs or alcohol.

S. This client's family is:
   1. very close and supportive.
   2. somewhat close.
   3. somewhat distant.
   4. very distant and uncaring.

T. In discussing his substance usage, this client appears to be:
   1. trying to look "worse" than is actually the case (i.e., faking bad).
   2. honest.
   3. trying to look "better" than is actually the case (i.e., faking good).

U. Based on client self-report, indicate yes or no for the following:
   1. Physical/emotional abuse or neglect?_____(Y/N)
   2. Sexual abuse?_____(Y/N)
   3. Suicide attempt or ideation?_____(Y/N)
   4. Family legal difficulties (other than client)?_____(Y/N)
   5. Family history of psychological problems?_____(Y/N)
   6. Family history of drug/alcohol abuse?_____(Y/N)

V. This clients drug/alcohol problem level is:
   1. Non-user.
   2. Mis-use or situational user.
   3. Abuse or drug/alcohol involved.
   4. Chemically dependent.