1993

Substance abuse and anxiety: Implications for drug use among parolees

Jonathan Robert Held

Follow this and additional works at: http://scholarworks.lib.csusb.edu/etd-project

Part of the Substance Abuse and Addiction Commons

Recommended Citation
http://scholarworks.lib.csusb.edu/etd-project/639

This Thesis is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.
SUBSTANCE ABUSE AND ANXIETY:
IMPLICATIONS FOR DRUG USE AMONG PAROLEES

------------

A Thesis
Presented To The
Faculty of
California State University,
San Bernardino

------------

In Partial Fulfillment
of the Requirements for the Degree
Master of Art
in
Psychology

------------

by
Jonathan Robert Held
June 1993
SUBSTANCE ABUSE AND ANXIETY:
IMPLICATIONS FOR DRUG USE AMONG PAROLEES

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

by
Jonathan Robert Held
June 1993

Approved:

Geraldine B. Stahly, Ph.D., Chair
Lynda W. Warren, Ph.D.
Matt L. Riggs, Ph.D.
TABLE OF CONTENTS

List of Tables ........................................ iv
Abstract .................................................. v
Introduction .............................................. 1
  Summary and Purpose of Study ................. 13
Method .................................................. 15
  Subjects ............................................. 15
  Instruments ........................................... 17
  Outcome Measures ..................................... 19
Procedure ............................................... 20
Results .................................................. 23
Discussion .............................................. 33
  Recommendations for Future Research .... 40
Implications ............................................ 42
Appendixes ............................................. 44
  Appendix A - Consent Form Cover Letter .... 44
  Appendix B - Consent Form ................... 45
  Appendix C - Debriefing Form ............... 46
  Appendix D - Demographic Questionnaire .. 47
  Appendix E - Combined Hassles and Uplifts Scales 48
  Appendix F - Self Evaluation Questionnaire . 51
References .............................................. 55
LIST OF TABLES

Table 1  Descriptive Summary of Sample. . . . . . . . . 27
Table 2  Total Number of Positive Drug Tests During
        The 3 - Month Period By Type of Drug . . . . 28
Table 3  Total Number of Positives On A Test By
        Test Basis . . . . . . . . . . . . . . . . . . . . 29
Table 4  Total Number of Parolees Testing Positive
        By Number of Tests . . . . . . . . . . . . . . . . 29
Table 5  Results of STAI (Form Y) . . . . . . . . . . 30
Table 6  Responses to Individual Items on the
        Combined Hassles and Uplifts Scales. . . . . 31
ABSTRACT

The study examined patterns of drug use among a sample of 30 male and 4 female parolees solicited from the San Bernardino Office of the California Department of Parole. The ethnic demographics of the sample consisted of 23.5% Caucasian; 23.5% Black, 20.6% Hispanic, 17.6% Native American, and 2.9% Other. The study hypothesized that higher levels of anxiety would be present among subjects testing positive for drug use than among subjects testing negative for drug use. Anxiety level was determined by means of the State-Trait Anxiety Inventory STAI (Form Y). The Combined Hassles and Uplifts Scale was utilized to identify family, occupational, environmental, and relational variables found to be associated with the use of illicit substances among subjects in the sample. Drug outcome was operationally defined as testing either positive or negative on drug testing conducted by the Department of Parole over the 3-month course of the study. Analysis of the data found no significant difference between groups on any of the variables utilized in the study. The findings revealed overall high State and Trait Anxiety levels being pervasive among both drug users and nonusers. The pattern of drug use revealed by the study supports the use of mandatory drug testing as a method of curtailing drug use among parolees.
INTRODUCTION

An article by the former coordinator of the National Drug Abuse Program (Murray, 1991) of the Federal Bureau of Prisons states that in 1991 approximately 51 percent of all offenders incarcerated in federal facilities were serving time for drug offenses. The Bureau of Justice Statistics (Murray, 1991) projects that by 1995 more than 69 percent of federal inmates will be incarcerated for drug offenses. These statistics pertain to drug convictions (possession or sale of drugs) and exclude other crimes which themselves may be related to drug use. For instance, a study of male arrestees in New York City and Washington, DC during 1984 found that over 50 percent of persons charged with burglary, larceny, or murder also tested positive for a drug at the time of the arrest (Wish et al, 1986). A report issued by the National Institute of Justice stated that during the first quarter of 1990, 80 percent of males arrested in San Diego, and 70 percent of those arrested in Los Angeles had tested positive for drug use at the time of the arrest.
Follow-up studies indicate that drug dependent parolees engage in a disproportionately high number of criminal activities while under parole supervision (Anglin, 1988; Anglin; McGlothlin, & Speckart, 1981; McGlothlin, Anglin, & Wilson, 1977; Wish, 1989). This study was undertaken in an effort to increase information on patterns of drug use among parolees identified as having had a history of drug use prior to parole supervision, and to identify factors associated with continued substance abuse among this group.

The criminal justice system relies upon psychologists and other mental health providers in the provision of treatment services for the substance abusing offender (Murray, 1991; Walter et al, 1991). This study examined the chemical dependence literature in an effort to identify factors associated with drug outcome among high risk populations. Treatment outcome studies constitute the primary source of information regarding variables associated with abuse patterns of drug users.

The majority of studies in the field of alcoholism and substance abuse have examined differences, rather than commonalities across different classes of drug abuse. However, several studies have suggested that multiple substance abuse is the pattern of behavior most prevalent among substance abusers (Carrol et al, 1977; Kaufman, 1977). There has been an increasing pattern of
polysubstance abuse observed among samples of younger alcoholics (Ashley, LeRiche, Olin, Hatcher, Kornaczewski, Schmidt, & Rankin, 1978). The prevalence of polysubstance abuse among probationers and parolees is discussed in an article by Capodanno and Chavaria (1991) in which it is noted that research findings (Thorpe et al, 1987) have estimated that as high as 87 percent of cocaine abusers also use other mood-altering substances. A meta analysis of 44 studies (Grande, Wolfe, Schubert, Patterson, & Brocco, 1984) which examined an association between alcoholism and other drug abuse found an 80 percent positive association between the two (Nace, 1987).

In a review of the chemical dependency literature from a behavioral perspective, Vuchinich and Tucker (1988) suggest that high levels of anxiety and emotional discomfort are necessary components to the tension reduction theory (TRT) of alcoholism and drug abuse. This theory suggests that events will be reinforcing if they reduce a drive state currently existing in the individual. It is proposed that the use of alcohol and other drugs reinforces such behavior because it reduces the internal state of tension.

Consequently, the TRT model concentrates on the internal state of the user as the critical dimension along which to characterize the variables that determine the reinforcing value of the drug (Vuchinich & Tucker, 1988).
In this model, the higher the level of anxiety and emotional discomfort being experienced by the individual, the more value the drug will have as a reinforcer. According to this hypothesis, alcohol and other CNS depressant drugs are reinforcing because they modify a critical internal state, with high levels of anxiety expected to correlate with a high degree of drug use among substance abusers.

Negative emotional states have been identified as one of the main types of relapse precipitants (Cumming et al., 1989). Grey, Osborn, and Reznikof (1986) examined the effect of psychosocial factors upon treatment retention and drug abuse outcome of 30 naltrexone and 30 methadone patients in outpatient opiate addiction treatment. Subjects were compared on pretreatment somatization, stress, and family support. Somatization has been associated with indices of psychopathology in various clinical populations, and has been linked to poor treatment outcome course among drug abusers. In the study, somatization was measured on the Cornell Medical Index (Weider, Brodman, Mittelman, Wechsler, & Wolff, 1946), a 95-item self-report symptom checklist which yields a single quantitative score of symptom frequency. This index has been shown to reliably discriminate between subjects who have serious psychiatric syndromes with prominent symptoms from normal subjects.
Life stress was assessed by the Hassles Scale (Kanner, Coyne, Schaeffer, & Lazarus, 1981) which lists 117 items which are believed to be indicative of stress. Severity of stress is expressed as the sum of the number of items endorsed. Perceived family support was evaluated by means of self-report. For the purpose of evaluating treatment outcome, retention was evaluated by the number of required clinic appointments kept during the 12-week period of the study. Degree of drug abuse was measured by the proportions of urinalysis that contained illicit drugs. The results of the study indicated that drug abuse was correlated significantly with all three pretreatment measures (somatization, stress, and perceived family support).

Upon initial intake for assessment for treatment, samples of alcoholics and substance abusers evidence a high degree of psychopathology (depression, anxiety, and hostility), as observed in a study conducted by Wood et al, (1983). However, there exists a difference of views represented in the literature as to whether these symptoms are secondary to substance abuse or mediate it.

Supporting the view that psychiatric symptoms are secondary to alcoholism, prospective studies of men who later became alcoholics found no evidence of childhood psychiatric symptoms when compared to adequate control populations (Schuckit et al, 1985). In a study examining
adolescent drug use from a developmental perspective, Baumrind (1985) failed to find evidence that adolescent drug use arises from pathological personality characteristics in middle-class, liberal subcultures, but did find evidence of antisocial aggression as an antecedent to onset of drug use among delinquent subcultures. Other research has indicated that, for the majority of adolescents, drug use is related to social and environmental influences, rather than to underlying psychopathology (Robbins & Pryzbeck, 1985).

Childhood risk factors which increase the risk for the subsequent development of substance abuse problems include a familial history of alcohol or drug abuse, family discord, ready access to drugs and alcohol, low socioeconomic status, urban residence, identification with a nonnormative peer group, low inculcation of normative social values, alienation, and weak cultural-religious affiliation (Tarter, 1988).

One means by which to assess and differentiate among enduring and more transient clinical symptoms is the Millon Clinical Multiaxial Inventory (MCMI). The MCMI incorporates both trait and state scales in a single inventory. In an effort to further document identifying personality dimensions among substance abusers, a study was conducted which utilized the MCMI to assess personality traits among alcoholics and drug abusers (Flynn et al, 1985). The
inpatient sample of 96 inpatient alcoholics being treated at a Veterans Administration Center consisted of males only. The subjects in the drug abuse sample consisted of 18 males and 15 females who were being treated in a South Florida community outpatient program for cocaine, heroin, and other addictions. Both sample groups were administered the MCMI at intake, at 1 month and at 3 months after intake into treatment. Data collected from the 3 administrations of the MCMI for both samples were analyzed by repeated t-tests. The analysis indicated significant changes between intake and 1 month into treatment for both the alcoholic and substance abuse samples. The alcoholics had evidenced clinically significant mean elevations on the Anxiety, Dysthymic, and Alcohol Abuse scales at intake. The substance abusers had significant elevations on the Borderline-Cycloid, Anxiety, Alcohol Abuse, and Drug Abuse scales upon intake. After 1 month of treatment, clinically significant elevations were obtained by the alcoholic sample on only the Alcohol Abuse scale. The substance abuse sample after 1 month of treatment evidenced significant elevations on the Alcohol Abuse and Drug Abuse scales only. Similar findings were evidenced at 3 months of treatment. The finding that with treatment (i.e., curtailment of drug use) reduction in anxiety level was evidenced among this population of alcoholics and substance abusers suggests that
anxiety level might be useful as a predictor variable in differentiating between substance abusers at high risk for the continuation or reacquisition of drug use and those at a reduced risk for such behavior.

A study which attempted to find a means to predict individuals at risk for program attrition was conducted by Craig (1984). Comparison of 135 program completers and 65 dropouts from an inpatient drug abuse detoxification and rehabilitation unit on 29 variables (MMPI validity and clinical Scales, 13 Wiggins content items, number of Grayson critical items selected, MacAndrews Alcoholism scale, and age) revealed few group differences with univariate analysis on which dropouts scored significantly higher. The results of the study indicated no significant differences between patients who completed the program and those who had dropped out.

In a study by Hull, Young, and Jouriles (1986) which examined level of self-awareness with alcohol consumption, high-private self-conscious subjects were predicted to drink following personal failure and to avoid drinking following personal success. In this study subjects were 35 male veterans from the alcohol treatment unit of an Indiana Veterans Administration hospital. The subjects completed a 23 item questionnair which yielded three subscale scores: private self-conscious, public self-conscious, and social
anxiety. After discharge from the hospital, subjects were contacted after 3 and 6 month intervals to determine whether or not they had relapsed. The results of the study were that 7 out of 10 (70%) high-private self-conscious individuals who had experienced relatively negative self-relevant life events had relapsed at the end of 3 months, as compared to 1 out of 7 (14%) high-private self-conscious individuals who had experienced relatively positive self-relevant life events. These findings appear to indicate that a population of substance abusers experiencing a preponderance of relatively negative self-relevant life events (such as many parolees encounter in the resumption of familial and occupational obligations upon release from prison) may be at an even higher degree of risk for the reacquisition of drug use than is the general population of substance abusers. The authors suggest that as attempts to predict relapse using a more general psychological framework have been relatively unsuccessful, the results of this study may be useful in predicting treatment outcome for high self-conscious individuals.

In a review of the literature, Moos and Finney (1983) found that comparatively little is known about the impact of life-context factors on alcohol abuse. To examine this area Moos and Finney formulated a conceptual model that considered the domains of extratreatment factors (family and
work settings and stressful events) in conjunction with patient and treatment factors. The researchers found that the extratreatment factors accounted for an increase of between 27 and 70 percent of the variance in treatment outcome, compared with between 4 and 20 percent accounted for by treatment related factors. Moos and Finney suggest that the effect of life context and environmental stressors be applied to understand the mechanisms through which extratreatment factors contribute to recovery and relapse, especially in light of the current difficulties encountered in predicting treatment outcome.

A study conducted by Means, Small, Capone, Condren, Peterson, and Hayward (1989) examined client demographics and outcome in outpatient cocaine treatment. The subjects utilized in the study were undergoing public agency sponsored treatment for addiction at Nassau County Medical Center. The study examined the records of the first 81 patients admitted to the program between October 9, 1985, and May 30, 1986. Fifty variables were labeled as descriptors of treatment outcome, of which eight proved to be associated with outcome. The study found that family background and living situation had a significant impact on outcome, while income, race, sex, and marital status, did not. The authors state that few demographic variables predicted outcome.
A study which looked at treatment and posttreatment variables on rapid relapse following residential treatment for chemical dependence examined MMPI scores of persons identified as treatment failures and those of persons identified as treatment successes (Svanuman & McAdoo, 1989). The sample consisted of 104 subjects who were being treated in a 3 to 4 week residential program for alcoholism and other chemical dependencies. All patients were administered the MMPI, the Alcohol Dependence Scale, and the Alcohol Problems questionnaire within the first 2 weeks of treatment. Other demographic and background data were also collected during these sessions. At three months posttreatment, the patients were administered a follow-up interview which inquired about alcohol and drug use practices, aftercare involvement of patients and their families, and their current levels of functioning. Using information obtained from this interview, 52 subjects were determined to be treatment failures on the basis of reported alcohol or drug use in each of the three months since treatment. Those persons identified as short term successes reported no drug or alcohol use in the 90 days since treatment and evidenced improved adjustment across several levels of functioning. In an effort to reduce heterogeneity, each of the 52 rapid relapsers was then matched with a short-term treatment success on the basis of
scores obtained on the 13 validity and clinical scales of the MMPI. A univariate analysis of variance found no significant differences between these matched groups on age, gender, years of education, marital status, and socioeconomic status.

For the psychiatric group (identified by means of MMPI scale elevations on at least four MMPI clinical scales with T scores above 70 (or of a T score above 80 on one clinical scale), it was found that continued reports of psychological distress involving anxiety, depressed mood, and sleep problems were most predictive of outcome failure. While the prognostic significance of psychological distress differed for the two groups, the levels of turmoil reported posttreatment did not differ. Also, the two groups (psychiatric and nonpsychiatric) did not differ substantially on predictor variables. The results of the study indicated that posttreatment factors appeared more important in predicting relapse than did pretreatment variables.

Given the parsimony of reliable predictor variables of treatment outcome identified in the literature, further inquiry in this area is required. Further research is needed which identifies individualized variables associated with relapse and recovery, as well as studies which examine the specific treatment needs of special target populations.
Summary and Purpose of Study

This study was undertaken in an effort to increase information on patterns of drug use among parolees identified as having had a history of drug use prior to parole supervision. It is important that individualized factors associated with drug use among this population be identified in order to develop and implement treatment strategies and support systems which are effective in reducing drug abuse in the parolee population.

The Combined Hassles and Uplifts Scale was used to examine the role of environmental stimuli in the areas of family, financial, occupational, and other situational and relational variables impacting drug use.

Also, as the chemical dependency literature has identified anxiety as a characteristic of the general population of substance abusers, the study investigated whether this finding would be replicated with this special population. The variables of state and trait anxiety were examined by means of subject responses to the Self-Evaluation Questionnaire of the State-Trait Anxiety Inventory (Form Y) which obtains scores on two scales. This measure has been shown to differentiate between immediate feelings of anxiety (S-Anxiety Scale) and more enduring feelings of apprehension (T-Anxiety Scale).
The prevalence of psychopathic features among convicted offenders has been documented by extensive research on prison populations (Panton, 1962). As research on psychopathic and antisocial personalities has indicated that these individuals exhibit lowered levels of baseline anxiety (Reid & Gutnik, 1982), it was hypothesized that lower levels of T-Trait Anxiety than is found in the general population would be manifested in the sample. However, due to low tolerance for frustration, deficits in impulse control, and a previous history of drug use as a coping mechanism, it was believed that subjects demonstrating a high level of S-State Anxiety would be prone to engage in drug use in an effort to alleviate dysphoric current mood states. Thus, it was predicted that an overall finding of low T-Trait Anxiety would be observed in the sample, with high S-State Anxiety levels differentiating between drug users and nonusers.

Drug outcome was operationally defined as testing either positive or negative on drug testing conducted by the Department of Parole over the 3-month course of the study. Drug outcome was thus separated into the categories of drug user or nonuser, as determined from the results of the drug testings. The selection of urine surveillance as the dependent variable provided for a more empirical measure of drug use than would have been be provided by means of self-report or other collateral sources.
METHOD

Subjects

All participants were residents of San Bernardino or Riverside counties. There were originally 60 subjects from the San Bernardino office of the California Department of Parole who had responded to the solicitation to participate in the study. Twenty six subjects were subsequently excluded from the analysis for the following reasons. Ten subjects who filled out questionnaires were being supervised by units not participating in the study. The files of seven subjects could not be administratively accessed. Three subjects had moved and their files had been transferred. The identifying information provided by three subjects was inaccurate. Drug testing was not available for two subjects; one of whom had absconded from supervision, and the other had been returned to prison. One subject had not completed the consent form. Thirty four subjects were thus retained for analysis.

Subjects were selected for participation on the basis of whether drug testing was a required condition of parole. All subjects in the sample were thereby identified by the Department of Corrections as having had a history of drug
abuse. The State mandates that offenders whose presentencing reports, prior arrests, current conviction, or information contained in law enforcement and/or prison files indicates extensive prior drug use be required to undergo drug testing as a condition of parole. Use of drugs while under parole supervision is a violation of parole and constitutes grounds for parole revocation.

The 34 subjects utilized in the study ranged in age from 22 to 52 years (M = 32.75, SD = 7.05). There were 30 (88.2%) males and 4 (11.8%) females. The racial composition consisted of 23.5% Caucasians, 23.5% Blacks, 20.6% Hispanics, 17.6% Native Americans, 2.9% Others, and 11.8% did not respond. The highest educational level attained was 2 years of college for 5.9% of the subjects; followed by 41.2% having completed the 12th grade, 23.5% the 11th, 5.9% the 10th, 2.9% the 9th, 2.9% the 8th, and 17.6% not responding. By self-report, 20.6% of the sample was employed, 67.6% were unemployed, while 11.8% gave no indication. On marital status 23.5% were married, 64.7% were single, and 11.8% gave no response.

All subjects were informed as to the voluntary basis of participation and that the study was being conducted as part of a student research project and not for the Department of
Parole. Informed consent forms were collected from all subjects. Participants were offered a five dollar financial renumeration for their participation in the study (a pilot study had determined the necessity of providing a financial incentive in order to facilitate subject participation).

Instruments

The State-Trait Anxiety Inventory (Form Y) was utilized as an index of anxiety level (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). The STAI (Form Y) consists of two 20-item scales which differentiate between immediate feelings of anxiety (S-Anxiety Scale) and more enduring feelings of apprehension (T-Anxiety Scale) which range in scoring from a minimum of 20 to a maximum of 80.

Norms are provided by samples of 6,000 high school and college students, 600 neuropsychiatric and medical and surgical patients, and 200 prison inmates utilized in the standardization of Form X (the earlier version of the inventory which is highly correlated with Form Y) and by the more than 5,000 subjects who were tested in the standardization of Form Y. Spielberger (1983) states that the "overall median alpha coefficients for the S-Anxiety and T-Anxiety scales for Form Y in the normative samples are .92 and .90, respectively, as compared to median alphas of .87 for S-Anxiety and .89 for T-Anxiety in the normative samples for Form X" (p. 14).
The Combined Hassles and Uplifts Scales (Kanner, Coyne, Schaeffer, & Lazarus, 1981; DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982) scale was used to identify situational variables and sources of daily stress. The development of the Hassles and Uplifts Scales was based on Lazarus and Folkman's cognitive-phenomenological conceptualization of psychological stress which considers that a "person's appraisals reflect environmental circumstances as well as personality characteristics, such as goal hierarchies and beliefs about self and world, and other factors that may result in special sources of vulnerability to stress" (Lazarus & Folkman, 1989, p. 4).

A factor analysis of the Daily Hassles Scale generated the following eight factors: future security, time pressures, work, household responsibilities, health, inner concerns, financial responsibilities, and neighborhood and environmental concerns (Lazarus & Folkman, 1989).

Normative data for the hassles portion of the Combined Hassles and Uplifts Scale is provided in a study by Kanner et al. (1981) of 100 white, middle-class adults aged 45 to 64 for whom data collected monthly for a period of nine months. Lazarus and Folkman (1981) report that "Hassles frequency scores were quite stable over this time period (.79), suggesting that hassles scores have both trait and state characteristics, each reflecting, empirically and
theoretically, a different side of the same coin" (p. 21).

While the Hassles Scale consists of 117 items, the Combined Hassles and Uplifts Scale is a shortened version which eliminates items tapping similar content areas and was "created to serve as a shorter measure of hassles and to enable people to rate the same transaction with the environment as a hassle, an uplift, or both" (Lazarus & Folkman, 1989, p. 1).

In using this measure, subjects are requested to specify (in magnitude of zero to three) the impact of each of the 53 items in terms of both how much of a "hassle" and how much of an "uplift" this area has recently been in their life. Scoring is determined by summing the number of items endorsed as being either "hassles" or "uplifts".

Outcome Measures

Degree of drug usage was determined during monthly drug testing. Monthly urine testing has been determined by the Parole Department to be sensitive to the detection of moderate to severe drug use by parolees. Individuals whose use of drugs is minimal will likely not be detected during monthly testing, while those using on a regular basis will be unable to discontinue use of the drug long enough prior to the urinalysis to avoid detection.

Analysis of urine specimens was performed by an independent laboratory under contract to the State.
Enzyme immunoassay testing for the detection of urine concentrations exceeding the cutoff criteria at levels low enough to indicate use within the past 3–5 days was performed. The following drugs were tested: amphetamines/methamphetamines, barbiturates, cocaine, methaqualone, opiates, and phencyclidine. No subjects were tested for marijuana, and only one was tested for alcohol.

The accuracy of enzyme immunoassay testing for detecting drug and drug metabolites has been established as averaging 80 percent (McFadden, 1992) with a 1 to 2 percent false-positive rate. While more sensitive (and expensive) laboratory technologies for drug testing do exist, the accuracy and reliability of enzyme immunoassay drug testing has been attested to by the scientific community (Del Carmen & Sorensen, 1988).

For the purpose of the study, testing positive for any drug (or combination of drugs) on any single testing would be considered an indication of moderate use. Testing positive on more than one occasion, or across all 3 monthly tests would indicate a severe pattern of drug use. Those testing negative for all three monthly tests would be considered minimal or nonusers.

Procedure

A student researcher solicited subjects outside the San
Bernardino office of the Parole Department. Subjects were informed as to the confidentiality and voluntary basis of participation and that each participant would receive five dollars.

An initial pilot study of 35 subjects had determined that the provision of a financial incentive would enhance participatory behavior. The Associated Students, Travel and Research Fund Committee of California State University, San Bernardino provided a three hundred dollar professional development grant which made it possible to offer five dollars for participation.

Subjects agreeing to participate were administered the demographic handout, the Self-Evaluation Questionnaire of the State-Trait Anxiety Inventory, and the Combined Hassles and Uplifts Scales at this time. When these materials were completed and returned to the researcher the subject received a five dollar bill. A few subjects received the five dollars prior to completion of the forms for motivational purposes.

Each subject was assigned an identifying number which was placed on all research materials gathered from participants and which was used by the Parole Department in providing the results of the drug testing. Urine specimens were provided by subjects (coming in to test at Parole office during mandatory visits) under specimen acquisition
guidelines of the Parole Department. At the end of the three month duration of the study (February thru April of 1992) the results of the monthly drug testing were made available to the researcher.

The Statistical Package for the Social Sciences (SPSS) was employed for all data analysis (Nice, Hull, Jenkins, Steinbrenner, & Bent, 1975).
RESULTS

The operational definition of the three categories of drug use behavior were as follows: testing positive for any drug (or combination of drugs) on any single testing indicated moderate use, testing positive on more than one occasion, or across all 3 monthly tests indicated a severe pattern of drug use, and those testing negative for all three monthly tests were considered to be minimal or nonusers.

As can be seen in Table 5, nonsignificant differences were obtained between drug users (Group 2, $M = 42.65$) and nondrug users (Group 1, $M = 42.72$) on state anxiety scores of the STAI, $t(32) = .02, p > .05$. Neither was any significant difference found between the group of drug users (Group 2, $M = 43.65$) and non drug users (Group 1, $M = 46.70$) on the trait scale of the STAI, $t(31) = .67, p > .05$. No significance was found for the demographic variable of age between the group of drug users ($M = 29.73$) and that of non drug users ($M = 27.63$), $t(32) = -.53, p > .05$. Also, no significance was found for the demographic variable of education between the group of drug users ($M = 11.35$) and non drug users ($M = 11.77$), $t(27) = .92, p > .05$.

No significance at $p < .05$ was obtained between group 1
and 2 on the Combined Hassles and Uplifts Scales. However, there were qualitative differences between groups on several of the individual items in the Combined Hassles and Uplifts Scale all of which showed significance at $p < .10$. Of interest were the findings of item 10 "Your friends" $t(25) = -1.85$, $p < .07$ and 47 "Amount of free time" $t(26) = -1.97$, $p < .06$ of the Uplifts Scale, and of items 22 "Financial care for someone who doesn't live with you" $t(21) = -1.84$, $p < .07$ and 38 "Conserving (gas, electricity, water, gasoline, etc.)" $t(17) = -1.91$, $p < .07$ of the Hassles Scale.

Table 1 presents a demographic summary of the sample. The 34 subjects ranged in age from 22 to 52 years ($M = 32.75$, $SD = 7.05$). There were 30 (88.2%) males and 4 (11.8%) females. The racial composition consisted of 23.5% Caucasian, 23.5% Black, 20.6% Hispanic, 17.6% Native American, 2.9% Other, and 11.8% did not respond. The average educational level was that of the 11th grade ($M = 11.46$, $SD = 1.23$). No significant differences were obtained based on demographic variables.

Table 2 presents the total number of positive drug tests during the 3 month period by type of drug. Central nervous system stimulants were the category of drug most prevalent in the results. The most commonly used drug by parolees was amphetamine and methamphetamine (the N-methyl derivative of amphetamine) comprising 44.8% of all positive
tests, followed by cocaine (34.69%). Central nervous system depressants were the next class of drug used by parolees, with the opiates accounting for 10.20% of all positive tests. Phencyclidine (a hallucinogen) accounted for 8.16% of all positive results. No testing was performed for marijuana (THC) and the only individual tested for alcohol was found to be positive for its use.

Table 3 illustrates the number of positive results obtained during each drug testing administration and indicates that the number of positive results declined for each subsequent drug testing.

Table 4 shows the percentage of parolees who tested positive on any one testing administration; on any two testing administrations, and on all three drug testing administrations. As shown in the table 67.64% of the sample tested positive for drug use at the first test administration. Table 4 indicates that 32.35% of all parolees (groups 1 and 2 combined) were multiple abusers i.e., tested positive on more than one drug testing administration. Looking only at group 2 (subjects who had tested positive for at least one drug on at least one testing administration) 47.82% of this group were multiple abusers.

Table 5 provides a comparison of group means on the State-Trait Anxiety Inventory STAI (Form Y) and shows that nonsignificant differences were obtained between drug users
and nondrug users on both the State and Trait Scales of the STAI.

Table 6 presents responses to the 4 items on the Combined Hassles and Uplifts Scales which are indicative of a qualitative difference between groups on these items.
Table 1
Descriptive Summary of Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>88.2</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>11.8</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>8</td>
<td>23.5</td>
</tr>
<tr>
<td>White</td>
<td>8</td>
<td>23.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7</td>
<td>20.6</td>
</tr>
<tr>
<td>Native American</td>
<td>6</td>
<td>17.6</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>2.9</td>
</tr>
<tr>
<td>No Response</td>
<td>4</td>
<td>11.8</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>8</td>
<td>23.5</td>
</tr>
<tr>
<td>Single</td>
<td>22</td>
<td>64.7</td>
</tr>
<tr>
<td>No Response</td>
<td>4</td>
<td>11.8</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>7</td>
<td>20.6</td>
</tr>
<tr>
<td>Unemployed</td>
<td>23</td>
<td>67.6</td>
</tr>
<tr>
<td>No Answer</td>
<td>4</td>
<td>11.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>28</td>
<td>32.75</td>
<td>7.05</td>
</tr>
<tr>
<td>Education</td>
<td>28</td>
<td>11.46</td>
<td>1.23</td>
</tr>
</tbody>
</table>
Table 2

Total Number of Positive Drug Tests During the 3-Month Period by Type of Drug

<table>
<thead>
<tr>
<th>Drug</th>
<th>Test Number</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Total</th>
<th>Pct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphetamine/Methamphetamine</td>
<td></td>
<td>11</td>
<td>6</td>
<td>5</td>
<td>22</td>
<td>44.89</td>
</tr>
<tr>
<td>Barbituates</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Cocaine</td>
<td></td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>17</td>
<td>34.69</td>
</tr>
<tr>
<td>Methaqualone</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Opiates</td>
<td></td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>10.20</td>
</tr>
<tr>
<td>Phencyclidine (PCP)</td>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>Alcohol</td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2.04</td>
</tr>
<tr>
<td>THC (Cannabinoids)</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>25</td>
<td>13</td>
<td>11</td>
<td>49</td>
<td></td>
</tr>
</tbody>
</table>

(n = 49 # of positive tests)
Table 3

Total Number of Positives on a Test by Test Basis

<table>
<thead>
<tr>
<th>Test Admin.</th>
<th>No. of Parolees</th>
<th>No. of Positive</th>
<th>Pct. of Total Positive's (Of All 3 Tests)</th>
<th>Pct. of All Parolees</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>23</td>
<td>25</td>
<td>51.02</td>
<td>67.64</td>
</tr>
<tr>
<td>Two</td>
<td>12</td>
<td>13</td>
<td>26.53</td>
<td>35.29</td>
</tr>
<tr>
<td>Three</td>
<td>11</td>
<td>11</td>
<td>22.44</td>
<td>32.35</td>
</tr>
</tbody>
</table>

(n = 49) (n = 34)

[Some subjects tested positive for more than 1 substance during a single drug testing administration]

Table 4

Total Number of Parolees Testing Positive by Number of Tests

<table>
<thead>
<tr>
<th>Number of Parolees Positive</th>
<th>Percent of Group 2</th>
<th>Percent of all Parolees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any 1 Test</td>
<td>11</td>
<td>47.82</td>
</tr>
<tr>
<td>Any 2 Tests</td>
<td>1</td>
<td>4.34</td>
</tr>
<tr>
<td>Any 3 Tests</td>
<td>11</td>
<td>47.82</td>
</tr>
</tbody>
</table>

(n = 23) (n = 34)

[Three of those testing positive on 1st testing were sent back to prison and subsequently were not included in further testings. None of those testing positive on the second testing had their parole revoked on that basis and were included in the third testing].
### Table 5
Results of STAI (Form Y)

<table>
<thead>
<tr>
<th></th>
<th>Group 1 testing negative for drugs (n = 11)</th>
<th>Group 2 testing positive for drugs (n = 23)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S-Anxiety Scale</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>42.72</td>
<td>42.65</td>
</tr>
<tr>
<td>SD</td>
<td>11.79</td>
<td>12.21</td>
</tr>
<tr>
<td><strong>T-Anxiety Scale</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>46.70</td>
<td>43.65</td>
</tr>
<tr>
<td>SD</td>
<td>10.53</td>
<td>12.49</td>
</tr>
</tbody>
</table>
Table 6
Responses to Individual Items on Combined Hassles and Uplifts Scales

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th></th>
<th>Group 2</th>
<th></th>
<th>Pooled Variance Estimate</th>
<th>2-Tail Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uplifts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U10</td>
<td>.57</td>
<td>1.13 (n=7)</td>
<td>1.50</td>
<td>1.14 (n=20)</td>
<td>.07</td>
<td>*</td>
</tr>
<tr>
<td>U47</td>
<td>.77</td>
<td>.66 (n=9)</td>
<td>1.63</td>
<td>1.21 (n=19)</td>
<td>.06</td>
<td>*</td>
</tr>
<tr>
<td>Hassles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H22</td>
<td>.28</td>
<td>.75 (n=7)</td>
<td>1.12</td>
<td>1.08 (n=16)</td>
<td>.07</td>
<td>*</td>
</tr>
<tr>
<td>H38</td>
<td>.50</td>
<td>.54 (n=6)</td>
<td>1.53</td>
<td>1.26 (n=13)</td>
<td>.07</td>
<td>*</td>
</tr>
</tbody>
</table>

[ * indicates significant results at p < .10]

Item       Question
U10        - Your friends
U47        - Amount of free time
H22        - Financial care for someone who doesn't live with you
H38        - Conserving (gas, electricity, water, gasoline, etc.)
DISCUSSION

The hypothesis that higher S-State Anxiety levels would be present among subjects testing positive for drug use than among subjects testing negative for drug use was not supported by the findings. One possible explanation for these results is that an insufficient sample size contributed to the commission of a Type II error.

While 60 participants were solicited only 34 subjects were retained for the analysis. It was anticipated that level of anxiety would exhibit a strong association with drug outcome and that consequently a small sample size would be sufficient. However, the sample size may have deterred the detection of a weaker correlation. According to Howell (1982) a 2 sample t test of significance would require 126 subjects in order to attain sufficient power (t power = 0.80, alpha = 0.05) for an effect of moderate size (p. 207). A lack of association was found in the study between demographic variables and outcome measures for the two sample groups. This finding supports previous research which found little association between demographic variables and outcome measures (Svanuman & McAdoo, 1989; Peterson &
Hayward, 1989).

On the State-Trait Anxiety Inventory both sample groups obtained considerable higher S-Anxiety mean scores than do samples of the general population. Normative data collected from a sample of 446 working adult males are reported by Spielberger, Gorsuch, Lushene, Vagg, and Jacobs (1983). The subjects who ranged in age from 19-39 obtained mean scores of 35.72 on the S-Anxiety scale and of 34.89 on the T-Anxiety scale. Spielberger et al. (1983) also reported norms based on a sample of 324 male college students in which mean S-Anxiety scores of 36.47 and of 38.30 on the T-Anxiety scale were observed.

A high level of S-Anxiety among the sample may, in part, be attributable to the test administration conditions. It may be that a visitation with their parole agent or coming in to the parole office for drug testing is an anxiety-prone event for many of the subjects.

However, Table 5 shows that both subject groups obtained mean S-Anxiety scores which were slightly lower than their mean T-Anxiety scores. (See Table 5). This pattern is interpreted by Spielberger (1983) as indicative of "relatively nonstressful" (neutral) testing conditions. In contrast, an example of subjects tested during highly stressful testing conditions is provided in the normative data collected of a sample of military recruits during the
first week of basic training. The military recruits obtained mean S-Anxiety scores of 44.05 and mean T-Anxiety scores of 37.64. The high state anxiety levels observed in the sample may be reflective of the adjustment difficulties encountered by many parolees in adapting to external demands; occupational/vocational, family/relational, and legal.

Also, high S-Anxiety levels may be representative of personality characteristics of this population as both groups also reported high T-Anxiety levels. Anastasi (1988) states that individuals high in T-Anxiety tend to perceive many situations as threatening with elevated A-State intensity" (p. 558).

Comparison of the parolee sample with normative data obtained from a sample of 212 prison inmates (Spielberger et al, 1983) in which prison inmates observed mean S-Anxiety scores of 45.96 and mean T-Anxiety scores of 44.64 is suggestive of a persevering pattern of high S and T-Anxiety levels among this population.

The direction of the data was contrary to expectations in that Group 1 reported mean scores on the T-Anxiety scale which (while nonsignificant) were somewhat higher than that of Group 2. (See Table 5). A curtailment of drug use may have acted to intensify anxiety levels for some of these subjects by a removal of the stress-response-dampening
effect of the drug (Levenson, Oyama, & Meek, 1987).

The Hassles and Uplifts Scales consist of three independent scales: the Daily Hassles Scale (117 items), the Uplifts Scale (135 items), and the Combined Hassles and Uplifts Scale (53 items). Although the original proposal called for the use of the Daily Hassles Scale, several difficulties with the use of this scale became evident during the initial pilot study. Subjects tended to react negatively to the number of questions being requested. It was decided that the shorter Combined Hassles and Uplifts Scale would be more appropriate for use with this population. Even with the use of the shorter Combined Hassles and Uplifts Scale one third to one half of the subjects failed to respond to many of the items in the measure.

The order of presentation of the research material may account for the lack of response on this measure. The State-Trait Anxiety Inventory was the first measure administered. All subjects completed the S-Anxiety scale and the T-Anxiety scale contained only 1 missing case. Prior to completing the Combined Hassles and Uplifts Scale subjects had already read both the cover letter and informed consent forms, filled out the demographic questionnaire, and completed the two 20-item scales of the STAI. Apparently, filling out the Combined Scale was regarded by many of the subjects as
simply too much of a hassle.

While the findings revealed no significant differences on the Combined Hassles and Uplifts Scale there were differences between Group 1 and 2 on several of the individual items of the scale at $p < .10$. At a significance level set as .10 there exists a probability of .10 (i.e., 10 chances out of 100) of obtaining significance attributable to a Type II Error. As the Combined Hassles and Uplifts Scales contain 53 items, it is probable that 5 items would be found to be significant due to chance. Therefore, the discussion of this data needs to be evaluated with caution.

The responses to item 10 on the Uplifts Scale as presented in Table 6 suggests that parolees testing positive for drug use attach a greater importance to peer associations than did subjects testing negative for drug use. Drug users may be more dependent, exhibit less autonomy, and possess a more externally directed locus of control than do nonusers. Parolees using drugs may have failed to achieve integration in a social network which is contributive to the maintenance of abstinence and thus be more likely to associate with peers engaging in substance abuse than are parolees who are nonusers. The sharing of drugs, drug paraphernalia, and peer reinforcement for drug use may be contributive factors in the higher affinity for peers evident among parolees testing positive for drugs.
Item 47 on the Uplifts Scale indicates that subjects testing positive for drugs had a higher affinity for free time than did subjects testing negative for drugs. The salience of substance-abusing behavior for the drug user along with a narrowing of his/her repertoire may tend to result in their placing a higher value on the availability of free time. Nonusers may be motivated to utilize their time in more constructive activities (work, vocational training, education, etc.) and consequently place a lower value on the availability of free time than do drug users.

Responses to items 22 and 38 of the Hassles Scale indicate that economic considerations are of greater importance to those testing positive for drug use than to subjects testing negative for drug use. Presumably, the allocation of financial resources for expenditures other than drugs is viewed unfavorably by some drug users. The responses to item 22 of the Hassles portion of the Combined Scale may suggest that providing for the care of others (payment of child support, etc.) is considered to be less problematic for subjects in Group 1).

The findings shown in Table 3 reveal an overall decrease in drug use by subjects over the course of the study. (See Table 3). The study originally had intended to obtain subjects recently released from prison during orientation sessions, which would have increased the
interpretive significance of this finding. Due to administrative considerations the study was unable to accomplish this and duration of parole status was not utilized as a variable in the study.

Three of those testing positive on the first testing were sent back to prison and subsequently were not included in further testings. This subject mortality may have tended to confound the finding of a decline in drug use over the 3 month period. The diminishment in use may be interpreted as supporting the effectiveness of drug testing in identifying and removing from the community those individuals whose use of drugs is deemed problematic. Also, it may be that prolonged monitoring results in the utilization by parolees of more effective strategies in avoiding drug detection.

Of those testing positive for drugs (Group 2), central nervous system stimulants were the class of drugs most prevalent in urine assays. (See Table 2). Amphetamine and methamphetamine was the most extensively used drug (44.89%) and cocaine and/or its derivatives the second most frequent (34.69%). Opiates (heroin, morphine, codeine, etc.) which are central nervous system depressants were the second most widely used class of drug and were present in 10.20% of these subjects. Phencyclidine (PCP) was detected in 8.16% of the subjects in Group 2. The one subject tested for alcohol (DUI conviction) was found to be positive for
alcohol use and returned to prison.

These findings seem to be consistent with the geographic locale of the study and demographics of the sample. San Bernardino county has a high incidence of methamphetamine production and use along with the more widespread problem of "crack" cocaine and other street drugs such as PCP.

Of the 34 subjects in the sample, the three whose parole status was revoked were all in Group 2 and were returned to prison after testing positive for drugs on Test 1, and prior to Test 2. One tested positive for methamphetamine, one for both methamphetamine and PCP, and one for alcohol.

Testing positive for drugs was not the determining factor in the revocation decisions for these subjects. A recommendation for parole revocation is based on a multiplicity of factors, including criminal activities, potential for violence, and compliance with conditions of parole. For the 31 subjects whose parole status was not revoked over the duration of the study, 8 tested positive for drugs only on the first drug testing administration; 1 tested positive on both the first and second test administrations, and 11 tested positive for drugs across all 3 testings.
Recommendations for Future Research

One area of difficulty in the study was posed by the institutional setting in which the study was conducted. While the present study received the full cooperation and much assistance from the supervisor who had provided authorization for the study, the high demands upon the time of parole agents together with the high rate of transfers of both agents and parolees became problematic in the data collection process.

One of the methodological problems of the study was the small sample size. Although 60 subjects had originally been obtained, 26 subjects were dropped from participation for a variety of reasons. With this population in particular, it is important to obtain a sufficient sample size so that attrition due to transfers, parole revocations, or other considerations does not endanger the research. It is also necessary to determine beforehand what degree of heterogeneity between groups is acceptable as the number of drug users will likely exceed that of nonusers.

The initial pilot study demonstrated the importance of providing a financial incentive to secure participation among this population not noted for altruistic behavior and highly resistant to perceived demands by authority.
Stringent measures also need to be taken to ensure that questionnaires and other materials are completed, as an agreement to participate does not necessarily mean that materials will be properly completed without safeguards being provided. The original design for this study had provided for the administration of the questionnaires to small groups of subjects in a room provided by the Department of Parole. Testing sessions of 45 minute duration were scheduled over a two-day period and an office memorandum briefly depicting the study, the dates and times of the sessions, and the provision of a five dollar payment for participation was distributed to parole agents requesting that they make this information available to their clients. However, no parolees turned up for any of the scheduled sessions. The researcher subsequently obtained subjects by solicitation outside the entrance or in the lobby of the Parole Office and questionnaires were administered on an individual basis in the lobby as individuals agreed to participate. This provided a less than optimal situation as subjects were at times distracted by others entering or leaving the lobby or were called away for meetings with their parole gents. Under these conditions it was not possible to check adequately each completed questionnaire for omissions as it was being returned to the researcher. Perhaps as a consequence, a few
subjects provided misleading identifying information and the data contained a larger proportion of missing cases on items than might have been the case if the questionnaires had been administered under more controlled conditions.

The qualitative findings suggest that rather than investigating anxiety (as anxiety appears to be systemic in this population), future research on risk factors related to drug use be directed toward an examination of attitudes and motivational factors. For instance, degree of separation from former peer group associations, expectations concerning the benefits of free time, and financial concerns might be areas for future investigation. Also, longitudinal studies may be useful in identifying risk factors which differentiate between patterns of drug use. Also, an examination of attitudinal and motivational variables might prove useful in matching parolees to specific treatment modalities.

Implications

While the current study was unsuccessful in identifying factors associated with an increased risk for substance use among this population, the findings did reveal that a large proportion of parolees (67.64% of the sample) engage in psychoactive substance use while under parole supervision.

While an injunction to refrain from using drugs combined with compulsory supervision and mandatory drug
testing does not equate to a course of treatment, it is the primary source of intervention many of these subjects will receive before returning to prison. "Only 19 percent of California parolees successfully complete their term of parole, compared with rates of 40 to 64 in New York, Pennsylvania, Texas and Illinois" according to a 1992 study released by the Center on Juvenile and Criminal Justice.

The findings of this study suggest that the threat of further incarceration is of little benefit in reducing drug use in this population. In light of the extensive research on the relationship between drug abuse and crime (Ball, Shaffer, & Nurco, 1983; Gropper, 1985; & Inciardi, 1979) and the cost-benefit effects of treatment in reducing posttreatment criminal activity of addicted offenders (Anglin & McGlothlin, 1988; Tims & Leukfeld, 1988; Vito, 1989; Wexler, Falkin, & Lipton, 1990) it is apparent that a comprehensive approach towards the provision of treatment for the offender population is needed.
Dear Participant:

Your participation in this study is strictly voluntary, you are under no obligation to participate. Whether you choose to participate or not will have no effect on your parole status.

The purpose of the study is to examine how environmental stressors may influence an individual's use of drugs. The study will involve approximately 45 minutes of your time. You will be asked to complete two questionnaires concerning how you feel about certain events in your life.

The study will also examine the results of your drug tests conducted by the Department of Parole over the next several months. All information gathered in the study will be held in strict confidentiality. You are free to terminate your participation at any time.

Sincerely,

Jon Held
graduate student
Dear Participant:

This study is designed to investigate effects of stress on the use of controlled substances.

We will need approximately 45 minutes of your time to fill out 2 questionnaires. Also, the results of your drug testing conducted by the Department of Parole will be examined by the researcher over the course of the study.

1. I understand that my participation in the study is voluntary, and that whether I choose to participate or not will have no bearing on my parole status.

2. I understand that my answers will be completely confidential, and will not be available to anyone but the researcher. I understand that the results of my drug testing will be made available to the researcher.

3. I understand that I am free to discontinue my participation in the study at any time and without penalty.

4. I understand that all information gathered in the study will be held in strict confidentiality, and that results of the study will be made available to me at my request.

Signed

Dated
Dear Participant:

Thank you for your participation in this study. The study was designed to examine how various environmental influences may have an effect upon an individual's use of drugs as a coping process. We hope to gain more understanding of patterns of drug use among parolees.

If you feel that drugs or alcohol are a problem area in your life, please get help. Your parole officer is available and willing to make referrals for drug treatment services.

Or, you may call Narcotics Anonymous at (714) 622-4274 and someone will be there to talk with you and to give the time and location of a meeting near your home.

Also, free counseling services are provided at:

Alcohol and Drug Administration
565 North Mt. Vernon Avenue - Suite 100
San Bernardino, CA (714) 387-7688

If you have any questions concerning your participation in the study please contact me.

Jon Held
graduate student

California State University
Department of Psychology
Telephone (714) 880-5570
5500 University Parkway
San Bernardino, CA 92407-2397
Dear Participant:

Please answer the questions to the best of your ability.

Your age today is _____

What is your current marital status?
   never married _____
   married _____
   divorced _____
   separated _____

Are you presently employed?
   fulltime _____
   part-time _____
   unemployed _____

What was the last grade completed in school?

What is your racial/ethnic background?
   Hispanic _____
   Black _____
   Anglo _____
   Native American _____
   Other _____
### APPENDIX - E COMBINED HASSLES AND UPLIFTS SCALES

<table>
<thead>
<tr>
<th>Hassles</th>
<th>Uplifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much of a hassle was this for you</td>
<td>How much of an uplift was this for you</td>
</tr>
<tr>
<td>Please circle one number on both sides</td>
<td></td>
</tr>
</tbody>
</table>

0 = None or not applicable                                              0 = None or not applicable
1 = Somewhat                                                            1 = Somewhat
2 = Quite a bit                                                         2 = Quite a bit
3 = A great deal                                                        3 = A great deal

<table>
<thead>
<tr>
<th>1. Your child(ren)</th>
<th>0 1 2 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Your parents-in-law</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>3. Other relative(s)</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>4. Your spouse</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>5. Time spent with family</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>6. Health or well-being of a family member</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>7. Sex</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>8. Intimacy</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>9. Family-related obligations</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>10. Your friend(s)</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>11. Fellow workers</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>12. Clients, customers, patients</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>13. Your supervisor or employer</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>14. The nature of your work</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>15. Your work load</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>16. Your job security</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>17. Meeting deadlines or goals on the job</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>18. Enough money for necessities (food, clothing, housing, health care, taxes, insurance, etc.)</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>19. Enough money for education</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>20. Enough money for emergencies</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>Hassles</td>
<td>Please circle one number on both sides</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>How much of a hassle was this for you</td>
<td>How much of an uplift was this for you</td>
</tr>
<tr>
<td>0 = None or not applicable</td>
<td>0 = None or not applicable</td>
</tr>
<tr>
<td>1 = Somewhat</td>
<td>1 = Somewhat</td>
</tr>
<tr>
<td>2 = Quite a bit</td>
<td>2 = Quite a bit</td>
</tr>
<tr>
<td>3 = A great deal</td>
<td>3 = A great deal</td>
</tr>
<tr>
<td>0 1 2 3 21. Enough money for extras (entertainment, recreation, vacations, etc.)</td>
<td>0 1 2 3 21. Enough money for extras (entertainment, recreation, vacations, etc.)</td>
</tr>
<tr>
<td>0 1 2 3 22. Financial care for someone who doesn't live with you</td>
<td>0 1 2 3 22. Financial care for someone who doesn't live with you</td>
</tr>
<tr>
<td>0 1 2 3 23. Investments</td>
<td>0 1 2 3 23. Investments</td>
</tr>
<tr>
<td>0 1 2 3 24. Your smoking</td>
<td>0 1 2 3 24. Your smoking</td>
</tr>
<tr>
<td>0 1 2 3 25. Your drinking</td>
<td>0 1 2 3 25. Your drinking</td>
</tr>
<tr>
<td>0 1 2 3 26. Effects of drugs and medications</td>
<td>0 1 2 3 26. Effects of drugs and medications</td>
</tr>
<tr>
<td>0 1 2 3 27. Your physical appearance</td>
<td>0 1 2 3 27. Your physical appearance</td>
</tr>
<tr>
<td>0 1 2 3 28. Time alone</td>
<td>0 1 2 3 28. Time alone</td>
</tr>
<tr>
<td>0 1 2 3 29. Exercise(s)</td>
<td>0 1 2 3 29. Exercise(s)</td>
</tr>
<tr>
<td>0 1 2 3 30. Your medical care</td>
<td>0 1 2 3 30. Your medical care</td>
</tr>
<tr>
<td>0 1 2 3 31. Your health</td>
<td>0 1 2 3 31. Your health</td>
</tr>
<tr>
<td>0 1 2 3 32. Your physical abilities</td>
<td>0 1 2 3 32. Your physical abilities</td>
</tr>
<tr>
<td>0 1 2 3 33. The weather</td>
<td>0 1 2 3 33. The weather</td>
</tr>
<tr>
<td>0 1 2 3 34. News events</td>
<td>0 1 2 3 34. News events</td>
</tr>
<tr>
<td>0 1 2 3 35. Your environment (quality of air, noise level, greenery, etc.)</td>
<td>0 1 2 3 35. Your environment (quality of air, noise level, greenery, etc.)</td>
</tr>
<tr>
<td>0 1 2 3 36. Political or social issues</td>
<td>0 1 2 3 36. Political or social issues</td>
</tr>
<tr>
<td>0 1 2 3 37. Your neighborhood (neighbors, setting)</td>
<td>0 1 2 3 37. Your neighborhood (neighbors, setting)</td>
</tr>
<tr>
<td>0 1 2 3 38. Conserving (gas, electricity, water, gasoline, etc.)</td>
<td>0 1 2 3 38. Conserving (gas, electricity, water, gasoline, etc.)</td>
</tr>
<tr>
<td>0 1 2 3 39. Pets</td>
<td>0 1 2 3 39. Pets</td>
</tr>
<tr>
<td>0 1 2 3 40. Cooking</td>
<td>0 1 2 3 40. Cooking</td>
</tr>
<tr>
<td>0 1 2 3 41. Housework</td>
<td>0 1 2 3 41. Housework</td>
</tr>
<tr>
<td>0 1 2 3 42. Home repairs</td>
<td>0 1 2 3 42. Home repairs</td>
</tr>
<tr>
<td>0 1 2 3 43. Yardwork</td>
<td>0 1 2 3 43. Yardwork</td>
</tr>
<tr>
<td>HASSLES</td>
<td>UPLIFTS</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>How much of a hassle was this for you</td>
<td>How much of an uplift was this for you</td>
</tr>
<tr>
<td>Please circle one number on both sides</td>
<td></td>
</tr>
<tr>
<td>0 = None or not applicable</td>
<td>0 = None or not applicable</td>
</tr>
<tr>
<td>1 = Somewhat</td>
<td>1 = Somewhat</td>
</tr>
<tr>
<td>2 = Quite a bit</td>
<td>2 = Quite a bit</td>
</tr>
<tr>
<td>3 = A great deal</td>
<td>3 = A great deal</td>
</tr>
<tr>
<td>0 1 2 3 44. Car maintenance</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>0 1 2 3 45. Taking care of paperwork</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>(paying bills, filling out forms, etc.)</td>
<td>forms, etc.)</td>
</tr>
<tr>
<td>0 1 2 3 46. Home entertainment (TV, music, reading, etc.)</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>0 1 2 3 47. Amount of free time</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>0 1 2 3 48. Recreation and entertainment outside the home (movies, sports, eating out, walking, etc.)</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>0 1 2 3 49. Eating (at home)</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>0 1 2 3 50. Church or community organizations</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>0 1 2 3 51. Legal matters</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>0 1 2 3 52. Being organized</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>0 1 2 3 53. Social commitments</td>
<td>0 1 2 3</td>
</tr>
</tbody>
</table>
APPENDIX - F SELF-EVALUATION QUESTIONNAIRE (STAI Form Y)

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you feel right now, that is, at this moment. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

1 = NOT AT ALL  
2 = SOMEWHAT  
3 = MODERATELY SO  
4 = VERY MUCH SO

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel calm</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I feel secure</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I am tense</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I feel strained</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I feel at ease</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I feel upset</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I am presently worrying over possible misfortunes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I feel satisfied</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I feel frightened</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I feel comfortable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I feel self-confident</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I feel nervous</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I am jittery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>I feel indecisive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I am relaxed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I feel content</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 = NOT AT ALL</td>
<td>2 = SOMEWHAT</td>
<td>3 = MODERATELY SO</td>
<td>4 = VERY MUCH SO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------</td>
<td>--------------</td>
<td>------------------</td>
<td>-----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I am worried</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I feel confused</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I feel steady</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I feel pleasant</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you generally feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

1 = ALMOST NEVER
2 = SOMETIMES
3 = OFTEN
4 = ALMOST ALWAYS

21. I feel pleasant

22. I feel nervous and restless

23. I feel satisfied with myself

24. I wish I could be as happy as others seem to be

25. I feel like a failure

26. I feel rested

27. I am "calm, cool, and collected"

28. I feel that difficulties are piling up so that I cannot overcome them

29. I worry too much over something that really doesn't matter

30. I am happy

31. I have disturbing thoughts

32. I lack self-confidence

33. I feel secure

34. I make decisions easily

35. I feel inadequate

36. I am content

37. Some unimportant though runs through my mind and bothers me
1 = ALMOST NEVER
2 = SOMETIMES
3 = OFTEN
4 = ALMOST ALWAYS

38. I take disappointments so keenly that I... 1 2 3 4
can't put them out of my mind.

39. I am a steady person ......... ......... ......... 1 2 3 4

40. I get in a state of tension or turmoil as ... 1 2 3 4
I think over my recent concerns and interests
REFERENCES


addicts who are beginning methadone maintenance treatment. *Journal of Clinical Psychology, 45*(6), 991-997.


61


