

groups, will be discussed along with specific strategies related to the treatment of cocaine and opioid abusers.

SEVERITY OF DRUG INVOLVEMENT AMONG ALCOHOLIC WOMEN: RELATIONSHIPS TO OTHER PSYCHOPATHOLOGY AND TO ADAPTATION. Fernando Gonzalez, Robert A. Zucker and Hiram E. Fitzgerald. Michigan State University, E. Lansing, MI.

This study examines psychological and demographic differences between (other) drug-using and non-drug-using alcoholic women and two contrast groups of controls in a population-based nonclinical sample of women. Respondents varied in extent of drug use and were categorized into one of five groups ranging from drug abusing/dependent alcoholics to controls. As in previous studies on males, higher levels of drug involvement were associated with higher rates of antisocial behavior, depression, and alcohol-related problems, and were inversely related to level of mental health, adaptive functioning, and income.

ALCOHOL EXPECTANCIES AS MEDIATORS OF OTHER BIOPSYCHOSOCIAL RISK FACTORS. Paul Greenbaum, Jack Darkes, Bruce Rather and Mark Goldman. University of South Florida, Tampa, FL.

Statistical modeling techniques and a longitudinal design were used to examine the hypothesis that alcohol expectancies serve as a central mediating process in alcohol use. In a sample of entering college students ($N = 107$), alcohol expectancies were found to mediate significant variance in the influence of several known antecedents of drinking upon drinking one year later. Expectancies also accounted for significant unique variance in drinking at the end of one year ($p < .01$) beyond that accounted for by initial drinking. Results support the hypothesis that antecedent risk factors may influence drinking in part through alcohol expectancies stored in memory which subsequently exert proximal influence on drinking decision.

COMPARATIVE COCAINE ABUSE TREATMENTS: CLIENT RETENTION AND TREATMENT EXPOSURE. Jeffrey A. Hoffman,* Barry D. Caudill,* Joseph J. Koman III,* James W. Luckey,† Patrick M. Flynn† and Robert L. Hubbard†. *Koba Institute, Washington, DC and †Research Triangle Institute, Research Triangle Park, NC.

Enhancing client retention in cocaine abuse treatment, where a majority of clients typically drop out within the first month, presents a significant challenge to clinicians. Preliminary findings suggest that more frequent group therapy improves retention, as does the inclusion of individual psychotherapy and family therapy. Group comparisons, however, are even more dramatic in the area of treatment exposure. Clients assigned to the more intensive combinations of group and individual therapy are exposed to two to four times as many treatment sessions. Current findings suggest that the provision of intensive services will enhance cocaine abusers' level of participation in therapy.

ADMINISTRATION OF MORPHINE BEFORE SURGERY MAY LEAD TO ACUTE MORPHINE TOLERANCE

AFTER SURGERY. Joel Katz, Brian P. Kavanagh, Hilary Nierenberg, Sandra Roger, John F. Boylan and Alan N. Sandler. The Toronto Hospital, Toronto, Ontario, Canada.

In an attempt to maximize the extent of nociceptive blockade before surgery, we investigated, under double-blind placebo-controlled conditions, the effects of administering preoperatively three classes of analgesic agents each by a different route. Thirty patients scheduled for thoracic surgery were randomized to two groups. Before surgery, the treatment group ($n = 15$) received intramuscular morphine [0.15 mg/kg] and a rectal indomethacin suppository [100 mg], while the placebo group ($n = 15$) received intramuscular midazolam [0.05 mg/kg] and a placebo rectal suppository. Following induction of anaesthesia, the treatment group received intercostal nerve blockade with bupivacaine (0.5% with epinephrine 1 : 200 000) 3 ml in the interspace of incision, as well as two spaces above and two spaces below. The placebo group received identical injections, but consisting of intercostal normal saline only. Postoperative pain was measured by a visual analogue scale (VAS), and postoperative analgesia consisted of intravenous morphine delivered by a patient-controlled analgesia (PCA) pump. As anticipated, PCA morphine consumption (mg) was significantly less in the treatment group in the early hours (1 to 6 h) after surgery ($p = 0.02$), probably reflecting the analgesic effects of the preoperative analgesic regimen. However, between 12 and 48 h after surgery this trend was reversed, with the pretreated group self-administering significantly more morphine than the placebo group ($p = 0.01$). There were no differences between the groups in postoperative VAS scores at any time point over the 72-h assessment period. These data suggest that preoperative administration of morphine to patients who are not in pain may lead to acute morphine tolerance after surgery.

SOCIAL VARIABILITY, ALCOHOL CONSUMPTION, AND THE INHERITED PREDISPOSITION TO ALCOHOLISM. D. LeMarquand, R. M. Roth, J. B. Peterson and R. O. Pihl. McGill University, Montréal, Québec, Canada.

Individual and familial/environmental differences were investigated as predictors of alcohol consumption in 30 males with (MGH) and 31 without (FH-) a multigenerational family history of alcoholism. MGH subjects were found to consume significantly more drinks per week than FH- subjects. Although groups differed significantly on a number of demographic variables, stepwise regression analysis revealed that only subject's years of education was a significant predictor of alcohol consumption in the entire sample and could remove the consumption difference between the groups. Implications for theories of alcoholism development are discussed.

CAFFEINE EFFECTS ON POSITIVE, NEGATIVE, AND NEUTRAL INDUCED MOODS. Robert F. Mirabella and Thomas W. Lombardo. University of Mississippi, University, MS.

Studies of the effects of caffeine on mood show inconsistent results. No study has attempted to control subjects' mood, and no study has evaluated whether caffeine can affect positive or negative moods. We manipulated mood by having 20 female subjects imagine scenes that induce neutral, positive, and negative moods and then tested the effects of 0-mg/

kg, 2-mg/kg, and 4-mg/kg doses of caffeine on these mood states in a within-subjects design. A second deviation from previous research was that, in addition to self-report measures, mood was measured by EMG recorded from zygomatic and corrugator facial muscles that reliably reflect mood. The mood manipulations were successful, but neither self-report nor EMG measures showed effects of caffeine on mood. The fact that our subjects were generally unable to discriminate when they received caffeine is consistent with finding no mood effects, based on recent research relating caffeine discriminability and mood effects.

ALCOHOL EXPECTANCIES IN PARENTS OF CHILDREN WITH EXTERNALIZING DISORDERS. Brooke S. G. Molina,* William E. Pelham* and Alan R. Lang.† *Western Psychiatric Institute and Clinic, University of Pittsburgh, Pittsburgh, PA, and †Florida State University, Tallahassee, FL.

The current study examined the relation between parent alcohol expectancies and self-reported drinking for parents of boys with attention deficit hyperactivity disorder, oppositional defiant disorder, or conduct disorder and parents of normals. Parents of deviant children perceived less negative effects of drinking on their parenting behaviors than parents of normal children and also reported drinking alcohol in greater quantity. Further, higher quantity of drinking was associated with less perceived negative effects. Taken together with previous laboratory investigations of parents' interactions with deviant children and alcohol consumption, the findings supported a cycle of reciprocal influence between parent drinking and deviant child behavior.

TOBACCO ABSTINENCE, SMOKING CUES, AND THE REINFORCING VALUE OF SMOKING. Kenneth A. Perkins, Leonard H. Epstein, James Grobe, Carolyn Fonte and Amy Dimarco. Western Psychiatric Institute & Clinic, University of Pittsburgh School of Medicine, Pittsburgh, PA.

A definition of the reinforcing value of a reinforcer is the degree to which an organism will work to obtain it. Male and female smokers engaged in a concurrent schedules task across four days, involving Overnight Smoking Abstinence/No Abstinence \times Smoking Cue/No Cue in a 2×2 within-subjects design. The smoking cue was a lit cigarette in an ashtray. The schedule of reinforcement for money (\$0.02) remained at variable ratio 4 (VR4) for each of the 10 trials, while the schedule for the cigarette puff ranged across VR4, VR8, VR12, VR16, and VR32. Responding for puffs was significantly greater following smoking abstinence vs. no abstinence, but there were no effects of the smoking cue. There were also no differences due to sex. Use of this concurrent schedule procedure may allow for examination of conditions which do or do not alter the reinforcing value of drug as well as nondrug reinforcers. (Supported by National Institute on Drug Abuse Grant DA-04174.)

OVER-THE-COUNTER SLEEP AIDS: WIDELY USED BUT RARELY STUDIED. J. L. Pillitteri, D. C. Person, L. T. Kozlowski, and T. D. Borkovec. The Pennsylvania State University, University Park, PA.

Over-the-counter (OTC) sleep aids are used in greater proportions than benzodiazepines for the treatment of sleep problems, yet very little research has focused on these drugs. The Food and Drug Administration established the safety and effectiveness of OTC sleep aids based on a review of 10 unpublished studies submitted by the drug manufacturers. This project examines these 10 studies and identifies several problems with them. Additionally, this project will report the results of a study which examined the use of OTC sleep aids by university students and the nature and extent of sleep problems. We also assessed the use of alcohol in conjunction with sleep problems. University students were an ideal sample for this study given their sleep habits and the appeal of drugs and alcohol in this population.

A QUALITATIVE ASSESSMENT OF NICOTINE ABSTINENCE SELF-EFFICACY. Nancy A. Piotrowski and Carlo C. DiClemente. University of California, San Francisco, CA, and University of Houston, Houston, TX.

Situation discrimination variability (SDV) was measured as the variance between items for individuals assessing their confidence (SDV-C) and temptation (SDV-T) on a Smoking Abstinence Self-Efficacy scale. It was hypothesized to reflect the adequacy of self-observational processes regarding situational elements critical to the development and maintenance of adaptive self-efficacy expectations.

In 455 subjects representing the precontemplation, contemplation, preparation, and action stages of smoking cessation, intake SDV-C and SDV-T related to stage of change. Post-treatment SDV-C demonstrated potential for enhancing the prediction of long-term smoking outcome, while demonstrating relationships to posttreatment change process activities supporting the notions underlying the construct's conceptualization.

PROBLEM DRINKING AND THE QUALITY OF SOCIAL RELATIONSHIPS DURING THE THIRD DECADE OF LIFE. S. W. Sadava and A. W. Pak. Brock University, St. Catharines, Ontario, Canada.

The decline in early adulthood of adolescent substance abuse coincides with adult roles, particularly committed relationships. We explore the dynamics of moderation of problem drinking, utilizing extensive questionnaire data sets derived from a longitudinal study of students during/after university graduation and a community sample of people in their twenties. Cross-sectional and longitudinal univariate and multivariate analyses indicate that consumption and alcohol-related problems (controlling for consumption) relate to involvement in a committed relationship, satisfaction with social life, and social supports. Loneliness is not related to consumption, but to alcohol problems. Trends with regard to attachment styles are reported.

EXPECTANCIES FOR THE EFFECTS OF COCAINE. John Schafer and William Fals. San Diego State University and University of California, San Diego, CA.

Several decades of research have established the importance of alcohol effect expectancies in the drinking process. These expectancies have been shown to relate to drinking pat-