

**CARDIOVASCULAR REACTIVITY AND ALCOHOL-INDUCED DAMPENING IN RISK FOR ALCOHOLISM AND HYPERTENSION.** Patricia J. Conrod, Robert O. Pihl and Blaine Ditto. McGill University, Montreal, Canada.

The present study investigates the cardiovascular response patterns exhibited by males with multigenerational histories of alcoholism (MFH), male offspring of hypertensives (HT), and male controls (FH-). Analyses indicates a trend for MFHs ( $n = 13$ ) to display greater sober heart rate reactivity to a shock stressor compared to the HT ( $N = 9$ ) and FH- ( $N = 11$ ) groups. The MFH males were significantly more reactive than the HT and FH- males for sober muscle tension reactivity,  $F(2, 24) = 5.07, p < 0.119$ . The MFHs displayed significantly greater alcohol-induced reactivity dampening than HTs and FH-s for heart rate,  $F(2, 35) = 3.49, p < 0.041$ .

**GENDER AND BEVERAGE PREFERENCE EFFECTS ON ALCOHOL EXPECTANCIES.** Tania M. Davis, Leslie H. Lundahl and Vincent J. Adesso. University of Wisconsin, Milwaukee, WI.

To investigate gender and beverage preference effects on alcohol-related expectancies, the Alcohol Expectancy Questionnaire (AEQ) was administered to 534 college students (female = 354) who indicated a preference for beer, wine, or liquor based on Cahalan Quantity-Frequency-Variability Drinking Practices Inventory scores. A 3 (Beverage Preference)  $\times$  2 (Gender) multivariate analysis of variance conducted on the six AEQ scales revealed beer drinkers reported greater expectancies of global positive changes, social assertiveness, and sexual pleasure than wine drinkers, and greater expectancies of power and aggression than wine and liquor drinkers. Results support the importance of beverage preference in alcohol expectancies.

**TWO- VS. FOUR-MILLIGRAM NICOTINE GUM: A REPORT FROM THE BOSTON RANDOMIZED TRIAL.** Kevin J. Doherty, Tara Kinnunen, Martha R. Carson and Arthur J. Garvey. Harvard School of Dental Medicine, Boston, MA.

We examined the effectiveness of 2-mg vs. 4-mg nicotine gum with smokers high and low in nicotine dependence. One hundred and eighty smokers were provided with 0-mg, 2-mg, or 4-mg nicotine gum along with adjunct counseling. Abstinence from smoking was assessed at five points during a 60-day period. Overall, length of abstinence increased with increasing nicotine dosage. However, analyses within dependence groups suggested that this trend was apparent mainly among highly dependent smokers. Smokers low in dependence were helped only by the 4-mg gum. The findings show that 4-mg nicotine gum can prolong abstinence both for smokers high and low in dependence.

**THE RELATIONSHIP BETWEEN ALCOHOL AND NICOTINE EXPECTANCIES AND SUBSTANCE DEPENDENCY.** Karen K. Downey and M. Marlyne Kilbey. Wayne State University, Detroit, MI.

Measures of drug use outcome expectancies have been found to predict substance use behavior and potential for

problems related to substance use/abuse. DSM-III-R conceptualizes psychoactive substance dependence as a biopsychosocial process. The relationship between expectancies and dependence was investigated to determine the extent to which the expectancy construct captures the psychological/cognitive dimension of dependence. Scores on both the Alcohol Expectancy Questionnaire and the Smoking Consequences Questionnaire were compared for nondependent and substance-dependent subjects. Dependent subjects were found to hold higher expectancies on several factor scale scores for each measure. The implications of these results for conceptualizing drug dependency are discussed.

**ALCOHOL EFFECTS ON PARENTING BEHAVIOR: SEQUENTIAL ANALYSES OF PARENT-CHILD INTERACTIONS.** John M. Eddy,\* Kristi D. Meisinger,\* William E. Pelham\* and Al R. Lang†. \*University of Pittsburgh, Pittsburgh, PA, and †Florida State University, Tallahassee, FL.

Several studies have documented an association between adult alcohol problems and the externalizing disorders of childhood. We recorded the behavioral observation data from the only study (Lang et al., 1989) that has systematically manipulated alcohol consumption and child behavior. In this study, parents of normal or ADHD/ODD/CD boys drank alcoholic or nonalcoholic beverages prior to interactions with "deviant" or "normal" child confederates. Using sequential analytic techniques, parenting behavior was examined during alcohol and no-alcohol conditions. Sequential analytic results are presented, and the theoretical implications of these results for social interactional theories of family processes and alcohol are discussed.

**RELATIONSHIP BETWEEN DRUG PREFERENCE AND CLINICAL SYNDROMES AND DIAGNOSES.** Patrick M. Flynn,\* Barry S. Brown,† Jeffrey A. Hoffman,‡ James W. Luckey,\* S. Gail Craddock,\* Robert L. Hubbard,\* Richard Needle,† Sid J. Schneider,‡ Joseph J. Koman, III,‡ Samuel Karson,§ Mohammed Vahid§ and Gary L. Palsgrove†. \*Research Triangle Institute, Research Triangle Park, NC, †NIDA, Rockville, MD, ‡Koba Associates, Washington, DC, §Second Genesis, Bethesda, MD.

A study will be conducted to investigate the relationship between the psychiatric diagnoses of individuals and their choice of either cocaine or heroin, each of which is associated with significant individual and community disruption, while differing markedly in their effects. Cocaine acts as an intense stimulant, and heroin has profound sedative effects. This multitrait, multimethod investigation will examine the relationship between preference for heroin or cocaine and DSM-III-R Axis I syndromes and Axis II disorders. Data from approximately 500 subjects will be grouped according to the drug of choice. Univariate and multivariate statistical analyses, as well as classification and discriminant analyses, will be used. The results will be evaluated and interpreted in relation to both the current sample and to the hypotheses and theories postulated as a result of earlier research on drug of choice and psychopathology. Implications from the study that may have ramifications for treatment, such as theory-based recommendations for interventions with particular drug-abusing

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/