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 CHIL-DREN 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  $\times$  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 patterns of both abusing and nonabusing populations. Recently, efforts have been made to measure cocaine effect expectancies. The present study was designed to improve upon earlier efforts to identify the domain of cocaine effect expectancies in a sample of 704 college students, replicated in an independent sample of 140 students. Three factors were identified: positive effects, negative effects, and arousal. Nonusers of cocaine expected significantly more positive and negative effects, and less arousing effects, than did users.

VALIDATION OF THE CAGE WITH ALCOHOL AND ILLICIT DRUG USE. Joseph E. Schumacher,\* Georganne Hoegerman,\* Cora E. Lewis,\* Jennifer L. Caveny\* and David R. Jacobs.† \*University of Alabama, Birmingham, AL, and †University of Minnesota, Minneapolis, MN.

The purpose of this study was to establish normative data on the CAGE (a four-item alcohol screening instrument) with a large population of young adults and validate the instrument with alcohol and extend to screening for illicit drug use. Responses to CAGE questions and predicted alcohol and drug use variables were collected from the Coronary Artery Risk Development in Young Adults (CARDIA) prospective cohort study. Subjects (N = 4624) were 45.2% male, 54.8% female, 50.6% white, and 49.4% black with a mean age of 27 years (SD = 3.64) and a mean of 13.9 years of education (SD = 2.26). The CAGE revealed moderate internal consistency and better specificity than sensitivity at correctly classifying alcohol and drug use. A minimal relation between the CAGE and alcohol and drug use was revealed with this young adult, non-heavy-drinking population.

REASONS FOR LICIT DRUG USE: RELATIONSHIPS TO ANXIETY SENSITIVITY LEVELS. Sherry H. Stewart, Linda Garron and Robert O. Pihl. NcGill University, Montral, Quebec, Canada.

The present study was designed to examine the relationship between levels of anxiety sensitivity (AS; fear of anxiety symptoms) and self-reported reasons for use of legal nonprescription drugs. Two hundred and nineteen undergraduate students were administered the Anxiety Sensitivity Index and a questionnaire sampling their use of alcohol, caffeine, and nicotine within the last year and their principal reasons for using each of these drugs. High-AS subjects were found to cite reasons related to the avoidance or reduction of anxiety and tension as major motivators for their use of alcohol significantly more frequently than low AS subjects. However, high-AS subjects were no less likely than low-AS subjects to report reasons related to arousal enhancement (e.g., "to perk me up") as the major motivator for their use of caffeine or nicotine. Thus, the present results support an important relationship between high levels of AS and the use of alcohol for reasons primarily related to the avoidance or reduction of anxiety/tension. However, the present results do not support any systematic relationship between levels of AS and the use of arousalenhancing drugs (i.e., caffeine, nicotine) to achieve or maintain stimulation.

ENVIRONMENTAL CONTEXTS SURROUNDING RE-COVERY BY TREATED AND UNTREATED PROBLEM DRINKERS. Jalie A. Tucker, Rudy E. Vuchinich and Michele M. Pukish. Auburn University, Auburn, AL.

We investigated events surrounding recoveries by problem drinkers who had received 1) no assistance, 2) AA only, or 3) treatment plus AA. Events were assessed during a 4-year period beginning 2 years before abstinence began (M=6.85 years abstinent). Recovery was associated with 1) decreases over time in events reflecting health, legal, and marital problems and 2) increases in events reflecting positive changes in health habits, finances, and social activities. Changes in legal, social, and health habit events were largely due to the two groups who had received assistance. These results suggest similarities in the environmental contexts surrounding recoveries achieved with and without assistance, whereas help-seeking was associated with greater prerecovery legal problems and with more postrecovery change in social activities and health habits.