

## ABSTRACTS

**Poster Session: Psychopharmacology: Lab to Clinic**  
*Monday, August 26, 10:00–11:50 a.m.*  
*Los Angeles Convention Center, Petrie Room*

**EFFECTS OF MARIJUANA ON HUMAN CIGARETTE SMOKING AND SUBJECTIVE RATINGS.** R. Nemeth-Coslett, Jack E. Henningfield, Mary O'Keefe and Roland R. Griffiths. Johns Hopkins University School of Medicine, Baltimore, MD.

Multiple measures of cigarette smoking, subjective effect and physiological effect were collected during 90 minute test sessions in volunteers with histories of recreational marijuana use. Before sessions, subjects smoked cigarettes containing THC (1.29%, 2.84%, 4.00%) or placebo using a standardized puffing procedure. Each dose was given four times in a randomized block sequence. Marijuana altered cigarette smoking rates in each of the eight subjects; however, results varied across subject and produced no consistent or significant group effect. Marijuana produced dose-related increases in heart rate and self-reported ratings of dose strength.

**ABUSE LIABILITY OF ATROPINE ASSESSED IN NORMAL VOLUNTEERS.** Jack E. Henningfield, National Institute on Drug Abuse Addiction Research Center and Johns Hopkins University School of Medicine, and David M. Penetar, Letterman Army Institute of Research, Presidio of San Francisco, CA.

Subjective effects of atropine sulfate injections were assessed in normal volunteers (n=10), as one portion of a 3-part study (behavioral, subjective and physiologic effects of atropine). Two standard psychometric instruments were evaluated to determine their utility in such studies. Each volunteer was given 0, 2 or 4 mg/70 kg atropine sulfate intramuscularly according to randomized block sequences on different test days. To assess psychoactivity of atropine, the Single Dose Questionnaire (SDQ) and the Addiction Research Center Inventory (ARCI) were given 1 hr before and 1 hr following drug injections. Data from the SDQ indicated that atropine produced significant discriminative effects but did not elevate scores on a drug-liking scale. Data from the ARCI indicated that atropine produced significant sedative-like effects (pentobarbital-chlorpromazine-alcohol scale). Despite the apparent lack of abuse potential determined by group analysis of the results, individual data suggested that 10 to 20% of such subjects would be vulnerable to atropine abuse.

**MOTIVATION AND TREATMENT OUTCOME: COMMITMENT TO ABSTINENCE.** Sharon M. Hall and Barbara Havassy. University of California, San Francisco, CA.

Motivation to change considered a crucial variable in addiction treatment outcome. In the present study, motivation was defined by commitment to abstinence, and was as-

sumed to have similar effects across addictions. Commitment was measured in samples of abstinent drug treatment clients, alcoholics and smokers. Level of commitment was correlated with treatment. It was hypothesized that greater commitment would predict longer time to relapse and fewer slips before relapse. It was also hypothesized that commitment would interact with mood, life events, and withdrawal symptoms to predict time to relapse and number of slips. Data has been collected on 100 subjects. A sample of 270 is anticipated. Hierarchical multiple regression will be used to test the hypotheses.

**DIETARY INFLUENCE ON MOOD DISTURBANCE.** Larry B. Christensen, Beth White and Kelly Krietsch. Texas A&M University, College Station, TX.

The influence of caffeine and sugar on mood disturbance was investigated using a single-subject reversal design. Ten of eighteen volunteer subjects exhibited a significant improvement in mood disturbance following a dietary change which eliminated caffeine and sugar from their diet. A deterioration in mood disturbance was demonstrated when these two dietary substances were added to their diet. Double-blind challenges confirmed that caffeine and sugar consumption contributed to the mood disturbance.

**AVOIDANCE/ESCAPE CONTINGENCIES AND d-AMPHETAMINE EFFECTS ON HUMAN AGGRESSIVE RESPONDING.** Don R. Cherek, Joel L. Steinberg and Dean Robinson, Department of Psychiatry, Louisiana State University, and Thomas H. Kelly, Veterans Administration Medical Center, Shreveport, LA.

Male subjects were administered placebo and three doses (5, 10 and 20 mg/70kg) of d-amphetamine in a laboratory situation which provided both aggressive and non-aggressive response options. Aggressive responding was elicited by subtracting money from the research subjects, which was attributed to a fictitious person. Aggressive responding was maintained by avoidance or escape from scheduled provocations (subtractions of points) for specified periods of time. D-amphetamine resulted in increases in non-aggressive monetary reinforced responses in most subjects. Aggressive responses typically evidenced inverted-U-shaped dose response curves, with increases in aggressive responses observed at 5 or 10 mg/70kg doses and decreases at higher doses.

**EFFICACY OF PREANNOUNCED AND UNANNOUNCED URINE MONITORING IN METHADONE MAINTENANCE.** John G. Baker and James B. Rounds, State University of New York at Buffalo, and Carol A. Carson, Sisters of Charity Hospital, Buffalo, NY.

Weekly preannounced urine testing and weekly un-