

tively correlated with HIV seropositivity. (Supported by DA 00050, DA 07209, and DA 05127.)

MODELING VERSUS SOCIAL FACILITATION EFFECTS ON WOMEN'S ALCOHOL CONSUMPTION. Bertrand D. Berger and Vincent J. Adesso. University of Wisconsin-Milwaukee, Milwaukee, WI.

The influence of the processes of modeling and social facilitation on women's drinking has been investigated little. Sixty female college students were assigned to a control, co-action, audience facilitation, typical modeling or to a modeling condition where attention was guaranteed. Subjects in the latter condition drank as much, took more sips, and had higher blood alcohol levels (BAL) than in the co-action condition. Additionally, subjects consumed more, took more sips, and had higher BALs when drinking alone than in the presence of another. It is suggested that modeling and societal values are mechanisms underlying drinking behavior in women.

NICOTINE EFFECTS ON HUMAN AVOIDANCE RESPONDING WITH UNAVOIDABLE POINT LOSS. R. H. Bennett, D. R. Cherek and R. Spiga. University of Texas Health Science Center, Houston, TX.

Male smokers were administered air or tobacco smoke of varying nicotine content (0.3, 1.2, and 2.7 mg nicotine yield) via the spirometric method. Prior to and following each administration subjects responded on a free-operant avoidance schedule in which the point loss-point loss interval was 5 seconds and the response-point loss interval was 20 seconds. Unavoidable point loss was superimposed on this schedule. Nicotine produced slight increases in overall response rates. Relatively larger increases were observed in local response rates immediately following unavoidable point losses. These increases were a function of nicotine condition.

HUMAN AVOIDANCE RESPONDING: EFFECTS OF TOBACCO ABSTINENCE. R. H. Bennett, D. R. Cherek and R. Spiga. University of Texas Health Science Center, Houston, TX.

Male, nicotine-dependent, tobacco smokers responded on a free-operant avoidance schedule with added unavoidable point loss. Responding during ad lib smoking conditions (baseline) was compared to responding during three tobacco abstinence conditions. The three conditions were nicotine gum, placebo gum, and no gum. In the nicotine and placebo gum conditions subjects were given 2 mg pieces of gum 30 minutes prior to each session. Absence of nicotine (placebo and no gum conditions) produced increases in overall response rates compared to nicotine gum and ad lib smoking conditions. Placebo gum and no gum conditions also produced the greatest local response rate increases following unavoidable point losses.

CONTROLLED MARIJUANA SMOKING: THE EFFECTS OF PUFF NUMBER. Julian L. Azorlosa and Maxine L. Stitzer. The Johns Hopkins University School of Medicine, Baltimore, MD.

Previous studies have suggested that people alter the way they smoke a marijuana cigarette depending on the potency of the cigarette. The purpose of this study was to establish marijuana dose-effect curves using precise methods of control over smoking

and inhalation behaviors. In six sessions, subjects smoked either 4, 10 or 25 puffs of a low (1.75% THC) or high (3.55% THC) potency marijuana. THC levels rose during smoking, peaked immediately after the last puff, and rapidly declined during the postsmoking period. There were orderly dose effects (puff and potency) for THC, heart rate increase and subjective reports of intoxication. Only the 25 puff high potency condition produced significant impairment on psychomotor performance. The study showed that marijuana smoking could be successfully controlled to ensure precise dosing and that behavioral and subjective effects are closely related to plasma THC levels.

EFFECTS OF NICOTINE ON ACOUSTIC STARTLE IN RATS. Jane B. Arci. Uniformed Services University of the Health Sciences, Bethesda, MD; David E. Morse. Armed Forces Radiobiology, Bethesda, MD; Neil E. Grunberg. Uniformed Services University of the Health Sciences, Bethesda, MD.

The acoustic startle response was used to measure changes in sensorimotor reactivity in response to nicotine administration and cessation. Reflex amplitude in rats receiving 6 or 12 mg/kg nicotine was compared to animals receiving saline on days 1 and 7 of drug administration and on days 1, 2, 3, 5 and 7 of drug cessation. Nicotine produced a dose-response effect of increased amplitude during cessation. The paradigm may provide a useful animal model for quantification of various treatments of nicotine withdrawal effects.

ALCOHOL AND EXPECTANCY EFFECTS ON WOMEN'S PHYSIOLOGICAL AND MOOD REPORTS. Vincent J. Adesso, Wendy J. Freitag and Merci A. Strobbe. University of Wisconsin-Milwaukee, Milwaukee, WI.

The present study investigates the effects of alcohol and expectancies on subjective bodily sensation, blood pressure, and self-reported moods in women. Measures were taken at baseline, peak intoxication, and during detoxification for 114 college student volunteers, who were heavy drinkers of alcohol. Alcohol subjects received enough alcohol to raise their blood alcohol level to 0.07 mg%. Preliminary results indicated that alcohol influenced women's self-reported bodily sensations and mood states, while alcohol expectancies contributed only to the reports of subjective bodily sensations. Changes in bodily sensations, mood states, and blood pressure seemed to vary as a function of time across the blood-alcohol curve.

TRENDS IN THE SCIENTIFIC LITERATURE ON COCAINE: 1966-1989. Alan J. Budney, Dawn Delaney and Stephen T. Higgins. University of Vermont, Burlington, VT.

The current cocaine epidemic has greatly increased the recognition and significance of cocaine use as a legitimate health-care problem. The scientific community has responded to the growth of the cocaine problem as evidenced by a rapid accumulation of scientific literature addressing health-care issues. For example, a MEDLINE search reveals that 1989 cocaine citations in the abuse/dependence area (n=335) increased 25.8- and 14.6-fold from 1969 and 1979, respectively, while reviews (n=64) increased 16- and 32-fold. The purpose of this paper is to describe the trends in the cocaine literature so that clinicians and researchers may become more aware of and have easier access to the information that is currently available. Areas in which a dearth of information exists will also be highlighted.