nonfear (85.4% correctly classified) subjects. The psychometric properties of this scale along with information on its factor structure and clinical usefulness are discussed.

CHANGES IN DRUG ABUSERS' HIV-1 RISK BEHAVIOR. Lawrence Greenfield, Robert K. Brooner and George E. Bigelow. The Johns Hopkins University School of Medicine, Baltimore, MD.

Assessment of changes in HIV risk behavior over time was conducted using self-report (subjective) and urinalysis (objective) measures. IVDUs in treatment reported significantly fewer injections and needle shares, less cocaine and more sedative use than did untreated IVDUs ($p<0.00$). IVDUs reported reductions in numbers of injections, shares and cocaine use over time ($p<0.00$), but no reductions in drug use over time were found through urinalysis. Questions were raised about the validity of the self-reported reductions.

EFFECT OF NICOTINE ON COGNITIVE AND PSYCHOMOTOR PERFORMANCE IN NONSMOKERS. Stephen J. Heishman, Laura M. Richards and Jack E. Henningfield. NIDA Addiction Research Center, Baltimore, MD.

This study examined the effects of repeated nicotine administration in nonsmokers. Seven male volunteers, who reported never smoking less than five cigarettes, lived on an inpatient research unit and participated in 10 consecutive experimental days in which they were administered various doses of nicotine polacrilex gum (Nicorette®) four times each day. Before and after each dose, cognitive and psychomotor performance was assessed. On days 1 and 2, only placebo was given. On days 3–10, four doses were administered each day in this order: 0, 2, 4, and 8 mg. Accuracy on two cognitive tasks (digit recall and logical reasoning) and psychomotor performance on a circular lights task were significantly impaired by nicotine. Nicotine did not enhance performance on any task.

CHRONIC ADMINISTRATION OF D_2-SELECTIVE DOPAMINE ANTAGONISTS ENHANCES SENSITIVITY TO COCAINE. Leonard L. Howell and Larry D. Byrd. Yerkes Regional Primate Research Center, Emory University, Atlanta, GA.

The behavioral effects of cocaine (0.03–3.0 mg/kg IV) were determined in squirrel monkeys (*Saimiri sciureus*) trained to lever-press under a fixed-interval (FI) 300-s stimulus-termination schedule. A session consisted of 13 consecutive FI components, each followed by a 60-s timeout. Graded doses of cocaine were injected during selected timeout periods (cumulative dosing). Subsequently, two D_2-selective antagonists, spiperone and raclopride, were administered chronically for two-week periods. Spiperone was administered IM twice per week, and raclopride was infused continuously via osmotic minipump. Both antagonists markedly suppressed responding during the two-week periods. When the effects of cocaine were redetermined three days after chronic drug administration was terminated, there was a parallel leftward shift in the dose-effect curve, indicating enhanced sensitivity to cocaine. One week later, sensitivity to cocaine had changed and was similar to that obtained prior to chronic drug administration. Chronic treatment with spiperone did not alter sensitivity to nisoxetine, a norepinephrine uptake inhibitor, or quipazine, a serotonin agonist. The results indicate that the enhanced sensitivity to cocaine is linked to its dopaminergic activity. (Supported by USPHS Grants DA-01161, DA-06264, DA-05346 and RR-00165 to the Yerkes Research Center from the Division of Research Resources, NIH.)

REINFORCING EFFECTS OF CAFFEINE VIA COLA. William K. Hunt and Rose Orozco. Claremont McKenna College, Claremont, CA.

Five moderate cola drinkers (3 cans per day) were tested to see if caffeine in their colas could function as a reinforcer when ingested in a cola over a 6-week period. Caffeine in cola is reported to be 46 mg (0.13 mg per ml). Caffeine at that level in cola functioned as a reinforcer in 2 of the 5 subjects. Further withdrawal was noted in 4 of the 5 subjects. These results replicate earlier findings that low doses (<100 mg) can serve as a reinforcer. Also this study is the first to show that caffeine in sodas can function as a reinforcer. Reasons are also postulated why caffeine failed to be a reinforcer in more subjects.

ALCOHOL, INSTRUCTIONS AND AGGRESSIVE BEHAVIOR: ACUTE AND CUMULATIVE DOSE EFFECTS. T. H. Kelley, R. W. Foltin and M. W. Fischman. The Johns Hopkins University School of Medicine, Baltimore, MD.

The influence of social instructions on the relationship between both acute and cumulative alcohol dose administration and human aggressive behavior was investigated. Sixteen healthy adult males were divided into two groups and instructed that the study either contained or did not contain a social dimension (free-operant aggressive behavior instructions). Session contingencies were identical for all subjects. Four from each group received acute alcohol doses (0, 0.25, 0.50, 0.75 or 1.0 g/kg) prior to single daily sessions, and four received 0.25 g/kg doses once per hour prior to four daily sessions. Regardless of administration conditions, alcohol increased responding only in those subjects receiving social-dimension instructions.

ALCOHOL INTAKE AND ALCOHOL SENSITIVITY: U-SHAPED CURVE FOR ETHNIC GROUPS. Julia A. Lee. The Marin Institute for the Prevention of Alcohol and Other Drug Problems, San Rafael, CA.

An earlier study found an inverse relationship between self-reported alcohol sensitivity and alcohol intake for five ethnic groups. In this study, similar analyses were carried out for a wider range of ethnic/religious groups. Group alcohol sensitivity ranked from lowest to highest as follows: Black, Jewish, White Protestant, Irish Catholic, Other Asian, Japanese, Chinese. Group alcohol intake as a function of alcohol sensitivity formed an inverted U-shaped curve, which peaked for the Irish Catholic group. Group alcohol sensitivity could be a measure of alcohol's pharmacological potency, which may have influenced the evolution of ethnic group norms and customs controlling alcohol intake.

ALCOHOL EXPECTANCIES, IMAGINED AND IN VIVO SITUATIONS: RELATIONSHIP TO DRINKING PATTERNS. Brian Levine and Mark S. Goldman. University of South Florida.

An extensive series of studies has demonstrated the utility of the construct of expectancies for the understanding and prediction of alcohol use and alcoholism. Variation in expectancies has