

NEUROPSYCHOLOGICAL, INTELLECTUAL AND PERSONALITY FUNCTIONING IN PCP ABUSING YOUNG ADULTS. Roger K. Light,* Gabriel Frommer,* M. David Lewis and James Bennett. *Indiana University and Coldwater Canyon Hospital, CA.

The present project was designed to assess neuropsychological and personality functioning in two separate samples of youthful drug abusers (N=116 and 52). One sample was comprised of patients recently hospitalized for substance abuse and was included to allow examination of the acute effects of Phencyclidine (PCP). The second sample was comprised of abusers who had either never been hospitalized, discharged from hospitalization or were soon to be discharged from a substance abuse facility. Cognitive and personality assessments were performed on the first sample and neuropsychological testing was performed on the second. Pre-drug use intellectual/achievement data were collected for a subsample of the study 2 subjects. The reliability with which drug abusers report the drugs of use was also examined.

COGNITIVE FACTORS IN SUBSTANCE ABUSE: THE CASE FOR EARLY LEARNING. Robert B. Noll, Robert A. Zucker, Constance Weil and Gregory Greenburg. Michigan State University, MI.

Little is known concerning early learning about drugs and their uses. Current prevention efforts focus upon the adolescent's personal experiences and peer group influences as significant sources of knowledge about drugs. Recent evi-

dence on children's knowledge of alcoholic beverages suggests that attitudes about specific drugs develop much earlier than adolescence. The present study compares alcohol related cognitions of preschool children who live in alcoholic families, to those of the same aged community control peers. The children with alcoholic parents demonstrated quicker recognition of alcoholic beverages and more frequently expected adults to consume alcoholic beverages. Discussion focuses on needed revisions in current prevention programs and theories of substance abuse development.

SAY IT STRAIGHT: SUBSTANCE ABUSE PREVENTION TRAINING FOR ADOLESCENTS. Paula Englander-Golden, Joan Elconin, Kevin Miller and Sally Parrish. University of Oklahoma, OK.

Sixth, seventh and eighth graders created and role played situations in which they wanted to say "no" to an offer of alcohol/drugs or to talk to a friend who was "using." Satir's body sculpting was used to illustrate communication styles, i.e., placating, blaming, irrelevant, super-reasonable, assertive/leveling and to maximize the probability of eliciting feelings. Youngsters exchanged information about their feelings as they interacted within role plays and practiced behaviors they found most effective. All experimental grades, but no controls, moved significantly toward assertiveness/leveling. Since training began 1½ years ago, not a single trained youngster has been identified as a new user as defined by alcohol/drug related school suspensions.

Poster Session: Comparative Physiological and Psychopharmacological Studies (Elkan Gamzu, chair)
Saturday, August 25, 9:00-10:50 a.m.—Sheraton Centre

AUTOMATED MONITORING OF PREFERRED AMBIENT TEMPERATURE AND BODY CORE TEMPERATURE. Paul R. Margues and Robert L. Spencer. University of Arizona, AZ.

These studies, made possible with a computer controlled thermocline and intraperitoneal transmitting thermistors, describe the effects of handling on core temperature, and the effects of central injections of dopamine (DA) and prostaglandin E1 (PGE1) on the thermal preference and core temperature of rats. PGE1 (0-1.0 µg) produced a dose-related increase in core temperature, and selection of warmer ambient temperatures. Dopamine (0-400 µg) produced a dose-related hypothermia and cold-seeking behavior. With the gradient-on, DA-injected rats showed a deeper hypothermia, and later showed a significant rebound increase in core temperature not found when the gradient was -off. Except during behavioral thermoregulation, DA induced increases in motor activity.

BIOASSAY OF N-α-METHYLCYCLOALKYLMETHYLNORMORPHINES. Edward T. Uyeno, J. I. DeGraw, J. A. Lawson, H. L. Johnson, G. H. Loew and M. Ellis. Life Sciences Division, SRI International Menlo Park, CA.

In our search for non-addicting analgesics we conducted

energy-conformation studies and selected N-α-methylcyclopropylmethylnormorphine and N-α-methylcyclobutylmethylnormorphine for synthesis. The cyclopropyl analog was approximately 85% as potent as morphine in the mouse tail-flick assay for analgesia and about twice as potent as the reference drug in the phenyl-quinone writhing assay. The analog was approximately one-fourth as potent as N-allylnormorphine in antagonizing the morphine-induced Straub-tail reaction. Thus, the results suggest that the N-α-methylcyclopropylmethyl analog may have further potential as a useful analgesic. The cyclobutyl derivative was ineffective in the tail-flick assay and only slightly active in the writhing and Straub-tail tests.

NEUROLEPTIC-INDUCED DEFICITS IN OPERANT RESPONDING FOR TEMPERATURE REINFORCEMENT. Aaron Ettenberg and Harry J. Carlisle. Department of Psychology, University of California, Santa Barbara, CA.

The hypothesis that neuroleptic drugs interfere with operant behaviors by attenuating the rewarding properties of positive reinforcers, was examined in rats trained to lever-press for external heat in a cold environment. Unlike traditional reinforcers, such as food and water, reducing the reward magnitude of heat (by reducing the intensity or duration of the stimulus) results in compensatory increases in