EXTRAPYRAMIDAL SYMPTOMS AMONG THE DEVELOPMENTALLY DISABLED: PREVALENCE, CORRELATIONS AND IMPLICATIONS. Ronald K. Stone, Joan May, William F. Alvarez and Barbara Fedullo. Sonoma State Developmental Center, Eldridge, CA.

Antipsychotic drugs are widely used in the care of institutionalized persons. There has been increasing concern about possible neurologic side effects of these drugs in the developmentally disabled (DD). A large DD population was examined for the prevalence and severity of extrapyramidal symptoms (EPS). The symptoms are being correlated with exposure to various drugs, measures of brain functioning and demographic factors. Preliminary findings indicate a dyskinesia prevalence of 49%. Dystonia, akathisia, parkinsonism and paroxysms occurred in 30.3%, 14%, 3% and 4.6% respectively. Results of the correlational analyses are expected to clarify issues regarding the relationships among EPS, drug usage, and brain functioning in this population.

PSYCHOLOGICAL VULNERABILITY OF DES-EXPOSED WOMEN. Martha Fried-Cassorla, Rutgers Medical School, Evelyn J. Bowers and Harvey D. Strassman, Rutgers Medical School at Camden, Theresa O. Scholl, University of Medicine and Dentistry of New Jersey.

In utero exposure to the synthetic hormone diethylstilbestrol (DES) produces pathological development in the reproductive systems of both women and experimental animals. It can also alter neuroendocrine/psychological development and consequent behavior in laboratory mammals. Accordingly, the adult psychological functioning of women exposed to DES prenatally seemed to warrant examination. We have tested the hypothesis that *in utero* exposure to DES might be responsible for an increased incidence of psychiatric illness. Using the NIMH Diagnostic Interview Schedule, we compared lifetime psychological functioning among DES exposed women and two control groups. Exposed women were significantly more depressed than either of the other groups, and remained more depressed than their sisters when age, parity, and occupation were considered. Clearly, psychological vulnerability needs to be considered in the care of DES exposed women.

CHILDHOOD HYPERACTIVITY AND NEUROPSYCHOLOGICAL PERFORMANCE IN ADOLESCENT SUBSTANCE ABUSERS. Avraham Schweiger and Irving Maltzman, University of California, Los Angeles and David Lewis and James E. Bennett, Adolescent Substance Abuse Program, Coldwater Canyon Hospital, North Hollywood, CA.

A test of attention and perceptuomotor coordination was given to a group of adolescent polydrug users who were hospitalized for substance abuse treatment. In addition, a symptoms checklist for identifying childhood hyperactivity—or Minimal Brain Dysfunction (Hy-MBD)—was administered to these patients. The results indicate that the number of reported symptoms of Hy-MBD is higher in the patients than in the normal population. Moreover, there was a negative correlation between performance on the attention test and the number of symptoms endorsed on the checklist. Together, these results suggest that the presence of childhood Hk-MBD symptoms might put the individual at risk for substance abuse and/or for other psychosocial problems, and not just for alcoholism. Additionally, neuropsychological deficits in such cases may reflect premorbid impairment and not just the adverse effects of the abused drugs.

PHYSIOLOGICAL AND SUBJECTIVE EFFECTS OF ORAL ETHANOL: ALCOHOLICS VS SOCIAL DRINKERS. Jaylan S. Turkkan, Maxine L. Stitzer, Mary E. McCaul and Carol Prescott. Department of Psychiatry and Behavioral Sciences, The Johns Hopkins University School of Medicine at Francis Scott Key Medical Center.

The unconditional effects of ethanol vs placebo drinks were studied in five alcoholics and three social drinkers. Before, during, and after the ingestion of drinks, subjects were continuously monitored for changes in blood pressure, heart rate, skin temperature, and blood alcohol content, in addition to changes in verbal report related to mood and craving. Doses of ethanol ranged between 0–1.7 g/kg for alcoholics, and from 0–1.0 g/kg for social drinkers. Ethanol decreased diastolic blood pressure, and increased heart rate and skin temperature. Generally, alcoholics demonstrated a lesser physiological response to ethanol, and less intense "high" feelings than did social drinkers, indicative of greater pre-study tolerance development, and also reported greater "craving" feelings compared with social drinkers after identical doses of ethanol.

GRADUAL SMOKING REDUCTION: ADHERENCE AND EFFECTS ON SUBSEQUENT SMOKING BEHAVIOR. Maxine L. Stitzer. Johns Hopkins University School of Medicine, Baltimore, MD.

When subjects (N=18) were contingently reinforced under an experimenter-determined schedule of gradually declining afternoon CO levels (from subject's baseline level to 8 ppm), 60% successfully adhered to the schedule and produced CO readings of 8 ppm or lower on day 10 of the intervention. Adherence to the gradual reduction schedule predicted subsequent performance under a voluntary smoking reduction test. Subjects successfully adhering to gradual reduction had lower after CO levels than did failures and lower levels than would be predicted from the best 60% of control subjects (N=15) who were not encouraged to cut down before the voluntary test. Successful adherence to gradual smoking reduction schedules may be predictive of subsequent success at making changes in smoking behavior.

EFFECTS OF ACUTE ADMINISTRATION OF DIAZEPAM (VALIUM) ON HUMAN AGGRESSIVE RESPONDING. Don R. Cherek, Thomas H. Kelly and Joel L. Steinberg. Department of Psychiatry, Louisiana State Univeristy, LA.

Male subjects were administered placebo and three doses (2.5, 5 and 10 mg/70 g) of diazepam 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 (subtrac-

tions of points) for specified periods of time. Diazepam had no effect or slightly decreased non-aggressive monetary reinforced responses. Aggressive responses were increased or decreased in individual subjects particularly at the 10 mg/70 kg diazepam dose.

DOUBLE-BLIND PLACEBO CONTROLLED TRIAL OF NICOTINE GUM AND PSYCHOLOGICAL TREATMENT. Sharon M. Hall, Reese T. Jones, Chrystal Tunstall and Dorothy Ginsberg. Department of Psychiatry, University of California, San Francisco, CA.

Two levels of Psychological treatment (Intensive Behavioral vs. Low Contact Control) were crossed with two levels of nicotine gum (2 mg vs. placebo). We have completed treatment and 12 and 26 week follow-up of the entire sample (N=139). Preliminary results indicate treatment efficacy is dependent on dependence level. Highly dependent smokers attain excellent abstinence rates when given nicotine gum in a low contact group. For these smokers, the addition of behavioral treatment to gum decrease abstinence rates substantially. For smokers low dependence, results are less clear. However, preliminary data indicate behavioral treatment produces the highest abstinence rates for these smokers, independent of gum condition. These data indicate differential treatment effectiveness as a function of dependence level, and suggest that we will ultimately be able to match smoking treatment patients to appropriate therapies.

EFFECTS OF RITALIN SR20 ON THE BEHAVIOR OF ADD CHILDREN. JoAnn Hoza and William E. Pelham. Florida State University, FL.

Methylphenidate is the most commonly prescribed stimulant for the treatment of an attention deficit disorder. Due to the short half-life of the drug, a second dose of medication is typically administered to the child at school. To eliminate a second administration, a longer acting form of methylphenidate has been introduced. Prior to this study, no systematic evaluations of its effects were conducted. Analyses reveal that SR20's time course does not appear to be similar to the regular form of methylphenidate or an equivalent dose of pemoline. Further drug comparisons revealed considerable individual differences in response to medication.

PSYCHOSTIMULANT-INDUCED SOCIAL WITHDRAWAL IN ADD CHILDREN. JoAnn Hoza and William E. Pelham. Florida State University, FL.

Peer relations have been demonstrated to be the best predictors of adult adjustment and a pervasive problem for attention deficit disordered children (ADD). Psychostimulant medication, the most commonly used treatment for ADD, appears to induce social withdrawal for a subgroup of ADD children. Eleven percent of the children in this study displayed social withdrawal on direct observations of peer interactions, precluding the recommendation of the associated medication. Without the assessment procedure that yielded evidence of social withdrawal, inappropriate medication recommendations based on other data would have been made for 75% of the children. Implications for assessment are discussed.

REFINING INDICATORS OF ALCOHOL USE: GUTTMAN SCALING AND FACTOR ANALYSIS. Matthew Schall, Allon Shiff and Irving Maltzman. Behavior and Alcohol Laboratory, Department of Psychology, University of California, Los Angeles, CA.

A negative behaviors with alcohol use scale and a using alcohol to cope scale were examined for their relationship to alcohol use in a college student population. Factor Analysis and Guttman Scaling were used to refine these scales into better indicators of students' risk for alcohol abuse. Correlations between the original scale scores, the refined scale scores and alcohol consumption, indicate that the strength of association between the scale scores and the quantity of alcohol consumed was not reduced even though the size of the scales was considerably decreased.

ALCOHOL CONSUMPTION AND COGNITIVE ABILITIES. Allon Shiff, Matthew Schall and Irving Maltzman. Behavior and Alcohol Laboratory, University of California, Los Angeles, CA.

Approxiamtely 200 undergraduate students were administered a battery of questionnaires on alcohol and drug use, personality, cognitive functioning and demographics. An examination of their total alcohol consumption and cognitive functioning was conducted using the Shipley Hartford Intelligence Scale. It was found that there was no significant correlation between the amount of alcohol consumed by an individual in a month and their performance on either the verbal or abstraction subtests of the scale.

MARIJUANA AND FOOD INTAKE IN A NATURALISTIC ENVIRONMENT. Richard W. Foltin, Jospeh V. Brady and Marian W. Fischman. The Johns Hopkins Medical Institutions, Baltimore, MD.

One group of two and one group of three healthy adult male volunteers resided in a naturalistic laboratory environment for up to 25 days. Marijuana or placebo cigarettes were smoked daily. Four of the five subjects increased food intake by 10 to 30% following marijuana smoking. This increase was due to increased consumption of between-meal snacks and was greatest after smoking the drug cigarette in a social situation.

BEHAVIOR AND SYMPTOM CORRELATES OF MHPG EXCRETION IN PSYCHIATRIC PATIENTS. Kim T. Mueser, Camarillo State Hospital and Brentwood VA Medical Center, Alexander J. Rosen, Javaid I. Javaid and John M. Davis, University of Illinois at Chicago and Steve Y. Sussman, Brentwood VA Medical Center and University of Southern California.

The relations between urinary MHPG excretion, ward behavior in two environments (lunch and gym), and symptomatology were examined in 58 psychiatric inpatients. Manic patients and paranoid schizophrenics excreted the highest levels of MHPG. For the depressives, MHPG excretion correlated negatively with eating in lunch and positively with self-reported appetite loss, suggesting a relation between high norepinephrine turnover and appetite distur-