aggressive and escape responding. Differences between subjects will be related to measures of hostility taken at the beginning of the study.

DRUG EFFECTS ON HUMAN SOCIAL BEHAVIOR IN A RESIDENTIAL LABORATORY. T. H. Kelley, R. W. Foltin and M. W. Fischman. The Johns Hopkins University School of Medicine, Baltimore, MD.

The effects of amphetamine, diazepam and marijuana were measured on a wide range of human behavior, including social and verbal interaction. Eighteen healthy adult male volunteers gave written consent and resided in groups of three for 15 consecutive days in a residential laboratory designed for continuous behavioral observation. Each day between 1700 and 2330, subjects had access to private areas, consisting of small efficiency apartments equipped with eating, sleeping and bathroom/shower facilities, as well as common social areas, in which a variety of recreational activites, including board games and videotaped movies were available. Six subjects received oral doses of amphetamine (0 or 10 mg/70 kg b.i.d., at 0930 and 1630); and six subjects received oral doses of diazepam (0, 5 or 10 mg/70 kg, at 0930 and 1630); and six subjects smoked marijuana cigarettes (0 or 2.7% THC, w/s, q.i.d., at 0945, 1315, 1700 and 2030). The six subjects in each drug condition were divided into groups of three. One group of three received placebo doses during days 2–4 and 8–10, and active doses during days 5–7 and 11–13. Dose order was counterbalanced in the second group. No drug doses were administered on day 1, and both groups received placebo on days 14–15. All daily doses were either placebo or active, and all three were administered in an ascending order. The distinction between the amount of time subjects spent in social contexts and the amount of verbal interaction that occurred within social contexts will be described, and drug effects on both of these dimensions of social behavior will be evaluated. Marijuana had no effect on the total amount of time subjects spent in social contexts. However, while in social contexts, subjects engaged in less verbal interaction following marijuana administration. Amphetamine's effects were dependent on baseline levels of verbal interactions, and diazepam's effects are still under evaluation.

DRUGS AND HUMAN SOCIAL INTERACTION: ARE THERE "SOCIOTROPIC" DRUG EFFECTS? Ralf Kohnen. University of Erlangen-Nuremburg, FRG.

"Sociotropic" drug effects are defined as "drug-induced changes of the social behaviors of individuals." Based on a review of experimental studies which evaluated social interactions as target behavior of different drugs' actions, the paper distinguishes between ("sociotropic") and secondary (i.e., "psychotropic") drug effects on social behavior. The term "sociotropic" implies that a class of drugs ("sociopharmaca") might exist which specifically influences social behavior. To prove this model of sociotropic drug effects, the results of three experimental studies are summarized. Social behavior was evaluated in interactive roleplay interactions (flirt, quarrel) and in everyday life conversations. Behavioral measures of speech behavior (on-off patterns of speech in different levels of integration) as well as ratings of behavior and mood demonstrate different influences of psychotropic drugs like benzodiazepines and sociotropic drugs like serotonin antagonists (experimental drugs). Changes in behavioral measures are predominantly seen with the serotoninergic drugs: in socially handicapped volunteers, conversational activities in everyday life (e.g., involvement in talks) increase, compared to placebo; in role-play situations, socially competent behavior like interruptions and double talks in the quarrel task as well as short utterances in the flirt situation was seen more frequently in drug conditions than under placebo treatment. Benzodiazepines and sedatives did not show any remarkable behavioral effect, however they influence processes of social perception. The answer to the title's question is: There are sociotropic drug effects. The proposed model proves to be suitable for further steps in human sociopharmacology, which include metaanalysis of available data from the sociotropic perspective. Methodological desiderata were outlined, and some speculations about an increasing importance of this scientific domain are enclosed.

SYMPOSIUM

Issues in Psychopharmacology Training for Clinical, Counseling and Developmental Psychologists
Chair: *M. Marlyne Kilbey*, Wayne State University, Detroit, MI

INTRODUCTION.

This symposium will cover current issues in psychopharmacology training for clinical, counseling and developmental psychologists. A description of the range of current psychopharmacology training will be given and evaluated in light of current clinical research and practice with clients who need and/or are receiving psychoactive medications. Issues of graduate, internship and postdoctoral training, continuing education, and retraining will be addressed from the perspective of necessary and/or model curriculum to prepare practitioner/researchers to treat clients who need or receive psychoactive medication, evaluate medication regimes, and develop medications for treatment of psychological disorders including substance abuse.

CHILD CLINICIANS NEED FOR PSYCHOPHARMACOLOGY TRAINING. Russell Barkley. University of Massachusetts Medical School, Worchester, MA.
(Abstract not available)

SURVEY OF GRADUATE TRAINING IN PSYCHOPHARMACOLOGY. M. Marlyne Kilbey. Wayne State University, Detroit, MI.
(Abstract not available)

PSYCHOPHARMACOLOGY: CLINICAL RESEARCH AND THERAPY. Mark Goldman. University of South Florida, Tampa, FL.
(Abstract not available)

PSYCHOPHARMACOLOGY: A PLAN FOR SPECIALTY TRAINING FOR CLINICAL PSYCHOLOGISTS. Allan G. Barclay. Wright State University, Dayton, OH.
(Abstract not available)

A MODEL CURRICULUM IN PSYCHOPHARMACOLOGY. Oakley S. Ray. Vanderbilt University, Nashville, TN.
(Abstract not available)

SYMPOSIUM

Smoking Cessation and Weight Gain: Underlying Mechanisms and Treatment Outcome. Chair: *Scott J. Leischow*, Palo Alto Center for Pulmonary Disease Prevention, Palo Alto, CA
Discussant: *Maxine Stitzer*, Johns Hopkins University Medical School, Baltimore, MD