to drinking because they signal decreased availability of valued activities other than alcohol (e.g., intimate relations), rather than because they create a negative affective or cognitive state that alcohol will alleviate. The second study investigated the possibility that posttreatment relapses could be predicted from pretreatment measures of the proportion of money income allocated to alcohol consumption. The assumption here is that the value of alcohol for an individual can be quantified by measuring the proportion of resource allocated to gain access to it. Results showed that proportion of income spent on drinking during 12 months pretreatment was a better predictor of relapse than amount of pretreatment drinking or demographic variables. These data and the conceptual framework are important for motivational analyses in at least two ways. First, they suggest that the motivation to consume alcohol is dependent on the environmental context, where context refers to the availability of valued activities other than alcohol. Second, perhaps the motivation to consume alcohol can be measured in terms of the proportion of an individual's resources that are allocated to drinking. The research and clinical implications of these two connections can be related to motivation theory.

MOTIVATIONAL ISSUES IN THE TREATMENT OF PROBLEM DRINKING: RELAPSE PREVENTION. Wanda M. Collier and G. Alan Marlatt. Addictive Behaviors Research Center, University of Washington, Seattle, WA.

An integral part of our alcohol treatment and relapse prevention strategy is motivation enhancement. Using the stages of behavior change model (Prochaska and DiClemente, 1983), our relapse prevention program attempts to enhance motivation during each stage of treatment—decision, active change and maintenance, and especially during long-term maintenance. Therefore, the assessment of client motivation is important at each stage of behavior change. A number of variables affect a client's motivation to modify problem drinking behavior including feelings of self-efficacy, self-control and self-esteem, thoughts of future reward or satisfaction, and avoidance of past experiences. At the decision stage, assessing outcome expectancies is important, for motivation is higher when a positive treatment outcome is expected. Use of a decision matrix is one technique to help clients distinguish positive and negative consequences of drinking, with a positive outcome being the elimination of these negative consequences. Similarly, during the active change and early maintenance stages, assessing clients' expectations about self-efficacy in maintaining treatment goals becomes paramount. Analysis of alcohol expectancies and preparation for coping with high-risk drinking situations, as well as the development of skills for coping with a lapse to problem drinking patterns, foster a further increase in self-efficacy. Enhanced efficacy adds to the motivation to reach treatment goals of either moderation or abstinence. Sustained motivation is needed to help prevent and/or contain a relapse to old patterns of behavior and to maintain the desired behavior once it is established. At the maintenance stage, clients are taught a new conceptualization of a relapse. Here clients learn to identify cognitive precursors to drinking, such as apparently irrelevant decisions (mini-decisions which lead one closer to a relapse), and subsequent cognitions, such as abstinence violation effects (guilt over failing to maintain goals of moderation or complete abstinence). These are reframed as opportunities to learn about oneself, and are used to illustrate the client's potential for directing his or her own drinking behavior. The desired results are enhanced feelings of self-efficacy, leading to increased motivation to use new skills in future high-risk drinking situations. In addition, clients are encouraged to undertake lifestyle changes that allow time out for themselves and provide alternative, "positive addictions" to drinking, including exercise programs, relaxation and other activities. Case studies illustrate the impact of this program on motivational processes.

INVITED ADDRESS

Issues in Pharmacology and Aging

Richard L. Sprott, National Institute on Aging, Bethesda, MD

Chair: *Marcus B. Waller,* University of North Carolina at Chapel Hill, Chapel Hill, NC

PAPER SESSION

Clinical and Pre-Clinical Studies in Behavioral Pharmacology

Chair: *Barbara L. Slifer,* University of New Orleans-Lakefront, New Orleans, LA.

DOPAMINERGIC INVOLVEMENT IN THE DISCRIMINATIVE STIMULUS PROPERTIES OF TRIPELENNAMINE. Tammy A. Winters and Barbara L. Slifer. University of New Orleans-Lakefront, New Orleans, LA.

Rats were trained to discriminate the H1-receptor blocker tripelennamine (TRP; 3.0 mg/kg) from saline under a fixed-ratio 30 schedule of food presentation. Haloperidol significantly decreased TRP-appropriate responding at the training dose without affecting response rates. Cocaine substituted in a dose-related manner for the TRP stimulus. Haloperidol also decreased TRP-like stimulus properties of cocaine. The D1-receptor antagonist SCH 23390 decreased TRP-appropriate responding, but not in the absence of pronounced response-rate disruptions. Thus, the discriminative stimulus properties of the H1-receptor antagonist TRP appear to involve a dopaminergic (possibly D2) component.

EXPOSURE TO PCBs VIA LACTATION ALTERS EXPLORATION AT MATURITY. Charles F. Matter, Dorthea B. Sager and Dennis M. Girard. University of Wisconsin-Green Bay, Green Bay, WI.

Lactating rat dams (Holtzman) were orally administered one of four concentrations (0 mg/kg, 8 mg/kg, 32 mg/kg and 64 mg/kg) of PCBs (Aroclor 1254) suspended in peanut oil (0.2 cc) on days 1, 3, 5, 7 and 9 postpartum. The exploratory activity of their female offspring was examined at three different ages: young adult (98–142 days); mature adult (188–215 days); and older mature adult (317–353 days). An observer electronically recorded four classes of behavior, and the combinations, while each of 240 subjects explored a novel environment. PCB exposure produced an array of significant effects in the young adult and mature adult groups; most consistent were increased locomotion and locomotion + manipulation (carrying).

DETERMINANTS OF RELAPSE FOR POLYSUBSTANCE ABUSERS. Lawrence Schonfeld. Florida Mental Health Institute, University of South Florida, Tampa, FL; Glenn E. Rohrer. Florida Alcoholism Treatment Center, Avon Park, FL; Larry W. Dupree. Florida Mental Health