

overall and by the characteristics of institutions and residents. Third, an attempt will be made to develop a joint theory of patterns of institutionalization and drug use. Patterns of drug use and institutionalization histories will be developed and interrelated to current drug use in institutions in the context of a pattern of residential and other life changes, as well as a pattern of noninstitutionalized use. Implications for policies regarding treatment and aftercare will also be presented.

**DRUG USE AND THE SEVERITY OF HOMELESSNESS.** Michael L. Dennis. Research Triangle Institute, Research Triangle Park, NC.

Although much attention has been focused in the last 10 years on mental illness among people who are homeless, substance abuse continues to be a predominant problem. It is related to the severity of an individual's homelessness, co-morbid mental illness, and a host of other social problems. Using data from the National Institute on Drug Abuse's DC\*MADS project, this presentation will examine these relationships and how estimates vary depending on the definition and sampling frames that are used.

The NIDA study includes four major samples from the 16 cities and counties in the Washington, DC, metropolitan area: shelter clients, soup kitchen clients, people in outdoor encampments, and people in nondwelling areas of a census block sample. The research design also includes a random temporal sample of 64 days between February and March that allows the calculation of seasonal trends for the shelter clients. The drug and alcohol use items are comparable to the National Household Survey on Drug Abuse and other DC\*MADS studies on people who are institutionalized, criminal offenders, school dropouts, pregnant, entering drug abuse treatment, or young adults.

This presentation will explore the correlation between the severity of alcohol use, illicit drug use, and mental illness, both in a respondent's lifetime and in the last 30 days. It will then examine how this cluster of problems is highly correlated with both the severity of homelessness and desocialization (e.g., at risk of becoming homeless, to living in a shelter, to living in a communal situation on the street, to living alone on the street) and a variety of social problems (e.g., illegal activity, physical illness, unemployment). It will then examine the extent to which people are getting access to the appropriate treatment or services, and the extent to which this access is related to the range of an individual's problems. Of particular concern here is the extent to which individuals with a dual diagnosis are getting help for both their mental- and substance-related problems.

#### **SYMPOSIUM**

*Childhood/Familial Characteristics and Alcohol/Substance Abuse: Etiological and Risk Factors.*

Chair and Discussant: *William E. Pelham, Jr.*, University of Pittsburgh Medical Center, Pittsburgh, PA.

**MULTIPLE PROCESSES IN TRANSMISSION OF RISK FROM PARENT TO CHILD.** Robert A. Zucker and Hiram E. Fitzgerald. Michigan State University, East Lansing, MI.

This presentation will utilize Wave One findings from the Michigan State University Longitudinal Study in elaborating

a multiple process framework for the transmission of risk for substance abuse and other behavior disorder from one generation to the next. The MSU project is a prospective, population-based high-risk-for-substance-abuse study, which is following families whose sons are initially 3 to 5 years of age. High-risk families have fathers who are convicted drunk drivers with very high blood alcohol levels, who are obtained by way of a total blanket of all drunk driving arrests occurring in a  $3\frac{1}{2}$  county wide area. Yoked community control families are drawn from the same neighborhoods of residence as are the high-risk families, have children within 6 months of age of the high-risk child, but parents in these families are without significant alcohol or any other drug involvement. An extensive and broad-ranging data set on all three family members, collected over nine sessions, and reassessed at 3-year intervals, provides the core data base for the study.

Wave One analyses have already documented a number of findings, which together are indicative of a set of multiple processes operating, all of which will need to be taken into account in any comprehensive, developmentally focused theory of the etiology of alcoholism and other drug involvement. These findings include: a) evidence for subtype differences in type of alcoholism among the parents, with antisocial alcoholism showing the operation of different etiological mechanisms, and different pathways of flow into adult alcoholic difficulty than does nonantisocial alcoholism; b) evidence that indicators of child trouble among preschoolers are consistent with the earlier emergence of the antisocial subtype; and c) evidence that the early pattern of psychosocial risk transmission, at least among preschoolers, is more directly mediated by mothers' behavior than by fathers'. Discussion focuses upon the linkage of these multiple processes into a multifactorial, developmentally framed theory of alcoholic etiologies.

**OBJECTIVE MEASUREMENT OF BEHAVIORAL ACTIVITY IN SONS OF SUBSTANCE ABUSERS.** Ralph Tarter and Timothy Blackson. University of Pittsburgh Medical Center, Pittsburgh, PA.

Forty 10-12-year-old boys having a father with a substance disorder (SA+) were compared to 60 age- and education-matched boys of normal fathers (SA-). Employing the actigraph positioned on the nondominant wrist of the subjects, it was found that SA+ boys demonstrated more behavioral activity than SA- boys during a continuous attention test and a test requiring motor restraint but not during resting condition. Within the SA+ group, subjects scored significantly higher on the actigraph measure of behavior activity level who qualified for a DSM-III-R diagnosis of disruptive behavior disorder (encompassing attention deficit disorder, conduct disorder, and oppositional defiant disorder).

Quantitative assessment of behavioral activity did not correlate with activity level measured by the Dimensions of Temperament Scale (revised) (DOTS-R) or the hyperactivity scale of the Child Behavior Checklist (CBCL). Behavioral activity level was, however, moderately associated with factorial scales of the DOTS and CBCL describing negative affect and externalizing behavior respectively. In addition, an association was observed between the child's activity level and negative affect of the father measured by the Multidimensional Personality Questionnaire.

Inasmuch as male offspring are a substantially elevated risk to develop a substance abuse disorder, these results suggest that high behavioral activity level may comprise one component of the psychological diathesis.

**PARENTAL ALCOHOL PROBLEMS AND EXTERNALIZING DISORDERS OF CHILDHOOD: LABORATORY STUDIES.** Alan R. Lang. Florida State University, Tallahassee, FL.

Four laboratory studies were conducted to examine the relationships between adult alcohol consumption and child behavior. Two studies investigated the effects of child behavior on subjective reports of adult distress and the associated amounts of alcohol consumed. Two other studies focused on the effects of alcohol on adults' perceptions of and interactions with a child. In all studies, child behavior was manipulated by having a confederate enact either a scripted ADHD/ODD/CD role or a normal child role. Subjects were parents of either normal (PNC) or ADHD/ODD/CD boys (PDC). The purpose of the experiments was to determine whether the known association between externalizing disorders of childhood and parental alcohol problems was a reciprocal and at least in part psychosocially mediated relationship. Results of the studies in which child behavior was the independent variable revealed that interactions with deviant confederates were rated as significantly more unpleasant and produced significantly more negative affect in all types of parents—mothers and fathers, married and single, and PNC and PDC. Further, among the PNC, fathers and single mothers consumed more alcohol in an ad lib session following exposure to deviant confederates. Despite equivalent levels of distress, PDC did not show increased consumption. However, PDC with a positive family history (FH+) of alcohol problems showed elevated drinking in response to the deviant confederate. Family history exerted no effect in the PNC. The PNC-PDC differences are discussed in relation to alcohol typologies. Results of the studies in which alcohol was the independent variable indicated that intoxicated parents saw less deviance in the deviant confederates than did sober parents, and that alcohol caused all subject groups to exhibit maladaptive parenting behaviors. These effects did not interact with parent type or status, indicating that both PNC and PDC showed the alcohol effects, as did both mothers and fathers.

**FAMILIAL INFLUENCES ON ADOLESCENT SUBSTANCE ABUSE.** Michael Windle. Research Institute on Alcoholism, Buffalo, NY.

Research focused on children of alcoholics has indicated that sons of male alcoholics are at a four-fold increased risk for alcoholism. As a consequence of this finding, the family has become a focal point of interest for the study of genetic, biological, psychological, and social factors influencing the development of alcohol and other substance abuse disorders. Furthermore, in order to facilitate early problem identification for optimal prevention/intervention, many ongoing studies are using developmental conceptual models, employing prospective, longitudinal research designs, and studying children/adolescents within the familial context. Two compatible approaches that have been used to study familial influences on offspring functioning are the high-risk design approach

(i.e., family history positive versus negative for alcoholism), and the social-interactional approach which focuses on interpersonal exchange processes (e.g., escalating coercive or aversive social exchanges).

Data from the Middle Adolescent Vulnerability Study (MAVS) are used to illustrate familial influences on adolescent substance use via both the high-risk and social-interactional approaches. The MAVS is a four-wave, prospective longitudinal study designed to assess the impact of the distal and proximal risk factors on adolescent substance use and other problem behaviors (e.g., delinquent activity). The sample consists of 1,150 adolescents (high school sophomores and juniors) with a roughly equal distribution of males and females. Data were collected via adolescent self-reports, primary caregiver ratings, and school record data. A range of risk factors were measured, including family history of alcoholism, maternal depression, family support, family conflict, and stressful life events.

With regard to the high-risk approach findings, significant differences in alcohol consumption, illicit drug use, or delinquent activity were *not* indicated for the family history positive (FHP) and family history negative (FHN) adolescents. However, family history of alcoholism did interact significantly with maternal depressive symptomatology in predicting higher levels of adolescent alcohol consumption and marijuana use. In addition, both family history of alcoholism and maternal depression were significant predictors of lower grade point average among adolescents. These findings are discussed with regard to high-risk via co-occurring, or comorbid, disorders, and an effort is made to account for disparate findings in the high-risk research literature with adolescent samples.

With regard to the social-interactional approach findings, structural equation modeling was used to support an interpersonal process model that suggests that childhood externalizing problems (e.g., conduct disordered symptoms) predicts maternal distress, which in turn predicts ineffective parental coping responses, which in turn predicts adolescent substance use. The findings are discussed with regard to the need to study interpersonal, reciprocal (parent-child) exchange processes that may exacerbate risk for substance abuse problems among children/adolescents, as well as among parents.

**PAPER SESSION**

*Clinical Issues in Substance Abuse Treatment.*

Chair: *Carolyn M. Mazure*, Yale University School of Medicine, New Haven, CT.

**COUNSELING EFFECTIVENESS AND INFORMATION PROCESSING IN ADULT CHILDREN OF ALCOHOLICS.** Nanci Jensen, Steven L. Schandler and Nancyann N. Cervantes. Chapman University, Orange, CA.

The factors that place adult children of alcoholics at risk for alcoholism may reduce the effectiveness of counseling interventions. As an initial exploration of this question, this study examined the relationship between counseling effectiveness and a predominant risk factor in a group of patients with a family history of alcoholism. The results indicated that persons with a family history of alcoholism not only are susceptible to alcohol abuse, but also may be less receptive or less responsive to general therapeutic interventions. These per-