

ISSN 0001



ADOLESCENCE

An International Quarterly Devoted to the Physiological, Psychological,
Psychiatric, Sociological, and Educational Aspects
of the Second Decade of Human Life

VOL. 26 ♣ NO. 102

SUMMER

1991

U.S. Department of Justice
National Institute of Justice

130973-
130976

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by
Adolescence

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

130973-
130976

LIBRA PUBLISHERS, INC.

ADOLESCENCE

VOLUME 26

NUMBER 102

SUMMER 1991

- 253 Disenfranchised Grief: The Loss of an Adolescent Romantic Relationship, *Margaret G. Kaczmarek and Barbara A. Backlund*
- 261 Stability and Change in Adolescents' Positive Attitudes Toward Guidance in Moral Development, *David S. Zern*
- 273 Eating Concerns on Two Christian and Two Nonsectarian College Campuses: A Measure of Sex and Campus Differences in Attitudes Toward Eating, *Kaye V. Cook, Karen L. Reiley, Ruth Stallsmith, and Helen Bray Garretson*
- 130973 287 Drug and Alcohol Prevention Project for Sixth Graders: First-Year Findings, *Karole J. Kreutter, Herbert Gewirtz, Joan E. Davenny, and Carol Love*
- 295 Young People's Perception of the Space Shuttle Disaster: Case Study, *Benina Berger Gould and Jeffrey B. Gould*
- 130974 305 Variables Associated with Success in an Adolescent Drug Treatment Program, *Judith Ellen Knapp, Donald I. Templer, W. Gary Cannon, and Shan Dobson*
- 319 Tom, Huck, and Oliver Stone as Advocates in Kohlberg's Just Community: Theory-Based Strategies for Moral Education, *Carol Gibb Harding and Kenneth Snyder*
- 331 The Development of Adolescent Sexual Intimacy: Implications for Counseling, *Estelle Weinstein and Efreem Rosen*
- 130975 341 A Multiple Regression Analysis of Family Factors Affecting the Potential for Alcoholism in College Students, *John T. Pardeck*
- 349 Revelations of Adolescent Mothers: An Intensive Case-Study Approach, *Judy G. Theriot, Alice G. Pecoraro, and Jane Ross-Reynolds*
- 361 The Relationship Between Self-Efficacy and Depression in Adolescents, *Marion F. Ehrenberg, David N. Cox, and Raymond F. Koopman*
- 375 Adolescent Dress, Part I: Dress and Body Markings of Psychiatric Outpatients and Inpatients, *John D. Michelman, Joanne B. Eicher, and Susan O. Michelman*
- 387 Ecologically Based Interventions in Residential and School Facilities: Theory or Practice? *Ann Marie Termini*
- 130976 399 Factors Related to Cigarette Smoking and Alcohol Use Among Adolescents, *Thorolfur Thorlindsson and Þorvaldur Vilhjalmsón*
- 419 Adolescent Sexuality and Public Policy, *Joseph A. Olsen, Larry C. Jensen, and Paul Michael Greaves*
- 431 Adolescents' Reactions to the Death of a Peer, *John M. O'Brien, Carol Goodenow, and Oliva Espin*

ACQUISITIONS

- 441 The Effects of Family Configuration and Support System Failures During Childhood and Adolescence on College Students' Self-Concepts and Social Skills, *Thomas S. Parish and Joycelyn G. Parish*
- 449 Do Adolescents Help and Share? *Darcy Miller*
- 457 Familial Correlates of Sexually Active Pregnant and Nonpregnant Adolescents, *Jawanda K. Barnett, Dennis R. Papini, and Edward Gbur*
- 473 The Relationship of Adolescent Peer Groups to the Incidence of Psychosocial Problems, *William R. Downs and Steven R. Rose*

BOOK REVIEWS

- 493 *Adolescent Group Psychotherapy*, Fern J. Azima and Lewis H. Richmond (Eds.)
- 493 *The Psychology of Adoption*, David M. Brodzinsky and Marshall D. Schechter (Eds.)
- 493 *Reweaving the Family Tapestry: A Multigenerational Approach to Families*, Fredda Herz Brown (Ed.)
- 494 *Care of the Dying Child: A Practical Guide for Those Who Help Others*, Robert W. Buckingham
- 494 *Fathers and Their Families*, Stanley H. Cath, Alan Gurwitt, and Linda Gunsberg (Eds.)
- 494 *Adolescent Pregnancy and Parenthood: An Annotated Guide*, Ann Creighton-Zollar
- 494 *Nature's Gambit: Child Prodigies and the Development of Human Potential*, David H. Feldman with Lynn T. Goldsmith
- 495 *Understanding Family Problems: A Psychological Approach*, Neil Frude
- 495 *Work/Family Conflicts: Private Lives—Public Responses*, Bradley K. Googins
- 495 *Trouble-Free Teaching: Solutions to Behavior Problems in the Classroom*, Herbert Grossman
- 496 *The Mental Health Professional and the Legal System*, Group for the Advancement of Psychiatry
- 496 *Your Child's Growing Mind: A Parent's Guide to Learning from Birth to Adolescence*, Jane M. Healy
- 497 *Working with Children and Their Families*, Martin Herbert
- 497 *Reading, Writing, and the Hickory Stick: The Appalling Story of Physical and Psychological Abuse in American Schools*, Irwin A. Hyman
- 497 *Psychology of the Unconscious: Mesmer, Janet, Freud, Jung, and Current Issues*, William L. Kelly
- 498 *Keeping Families Together: The Homebuilders Model*, Jill Kinney, David Haapala, and Charlotte Booth
- 498 *Skills for Living: Group Counseling Activities for Young Adolescents*, Rosemarie S. Morganett

A MULTIPLE REGRESSION ANALYSIS OF FAMILY FACTORS AFFECTING THE POTENTIAL FOR ALCOHOLISM IN COLLEGE STUDENTS

John T. Pardeck

ABSTRACT

This study explored the effects of the family system on the potential for alcoholism in college students. Analysis of the data indicated that students' gender, race, and how often they consumed alcohol were unrelated to the potential for alcoholism. However, perceived conflict in the students' family of origin appeared to increase the potential for alcoholism. This finding is consistent with family systems theory, used by many human service professionals as a basis for assessing and treating chemical dependency.

Alcohol and drug abuse is a growing American phenomenon among young people. Even though the majority of American adolescents are not substantially impaired by their drug use, a number of experts have warned that it represents a major public health problem and that we are in danger of losing an entire generation to drugs (Peterson, 1980). Despite these warnings, rates of use continue to escalate. The following data support these concerns:

1. Sixty percent of high school seniors have used marijuana at least once (Johnston, Bachman, & O'Malley, 1981).
2. Nine percent of all high school seniors use marijuana on a daily basis (Johnston et al., 1981).
3. Six percent of high school seniors use alcohol on a daily basis (Johnston et al., 1981).
4. Ninety-three percent of high school seniors have used alcohol at least once (Johnston et al., 1981).
5. Twelve percent of high school seniors use illegally obtained stimulants at least once a month (Johnston et al., 1981).
6. Over one-third of PCP, marijuana, and over-the-counter analgesics-related visits to hospital emergency rooms made each year are by adolescents (National Institute on Drug Abuse, 1979).
7. Adolescents represent nearly a quarter of the yearly deaths attributed to use of Quaaludes (National Institute on Drug Abuse, 1979).

Reprint requests to John T. Pardeck, Ph.D., A.C.S.W., Department of Social Work, Southwest Missouri State University, Springfield, Missouri 65804.

8. More than seventy percent of college males, and more than fifty percent of college females, drink at least weekly, and nearly twenty percent drink at least three or four times each week (Wechsler, 1979).
9. Automobile accidents, many of them alcohol-related, are the leading cause of death among teenagers (Steinberg, 1985).

Clearly, research on the topic of drug abuse among American youth suggests that it is a major social problem.

FAMILY SYSTEMS THEORY AND CHEMICAL ABUSE

Systems theory has emerged as one of the leading theories within the fields of psychiatry, psychology, and social work for explaining chemical abuse and dependency. The use of systems theory by mental health professionals can be traced to 19th-century sociology (Timasheff, 1967). Although modern-day systems theory has changed considerably from its original form, its unique components remain the same: (1) it places great importance on interaction and interdependence of the parts of a social system, with change in one part of the system imposing change in another part; (2) the social environment is understood to play a major role in individual social functioning; and (3) the focus of pathology is defined at the systems level, not the individual level (Pardeck, 1989).

Systems theory is a significant departure from traditional individual-based explanations often used for understanding and treating pathology. In fact, therapists such as Haley and the late Virginia Satir view all individual pathology as mediated by social systems, in particular the family system (Pardeck, 1981). Over the last several decades, systems theory has heavily influenced how mental health professionals assess and treat numerous mental health problems.

Chemical abuse and dependency is viewed by many clinicians as a family systems based problem (Preli, Protinsky, & Cross, 1990). Social theorists increasingly appear to agree with this position as an explanation of why adolescents abuse drugs, including alcohol (Bateson, Jackson, Haley, & Weakland, 1956; Haley, 1973; Jackson, 1957). Ben-Yehuda and Schindell (1981), Stanton (1978), Wilson and Oxford (1978), as well as numerous other systems theorists, clearly conclude that the family is a major factor in the initiation, maintenance, cessation, and prevention of alcohol and drug use by one or more family members.

A family systems approach suggests that young people who abuse

chemicals often are significantly connected (developmentally and physically) to their families of origin. Their behavior is tightly bound up with family pressures resulting from adolescence itself and the young person's push toward separation and individuation. Chemical abuse in this context usually functions to retard or postpone the process of separation and individuation, and can preserve the dysfunctional alignments of the troubled family system for years. Alcohol and drug abusers may continue this pattern into their 20s, 30s, and beyond (Vaillant, 1966).

Adolescence must be considered in the context of both the individual and the family life cycle. For the individual, adolescence is a time of extreme egocentrism, of heightened sexuality, of reawakened conflict from childhood, and of growing need for independence coupled with periods of increased dependence (Pardeck & Pardeck, 1990). In troubled family systems, the turbulence of adolescence is intensified; consequently, experimentation with alcohol or drugs by the adolescent only adds to the family's "cumulative stress." In a troubled family system, not only is the family in turmoil, but in addition the adolescent is in the midst of an identity crisis which may well add to family dysfunction. In turn, chemical abuse by the adolescent may be one way in which family dysfunction becomes manifest. Troubled families have special difficulty in dealing with changes, especially changes as far-reaching as those related to adolescence (Skynner, 1981). For many troubled families, drug and alcohol abuse may serve multiple purposes. As Ackerman (1980) suggests, chemical abuse preserves the predictability of family members within the dysfunctional family system. Drug and alcohol abuse, in particular for the adolescent, prolongs dependency on the family system, helping to ensure that the conflict within the family continues. This dysfunctional patterning will change only if the family is willing to enter treatment (Pardeck, 1988a, 1988b).

Given the role that the family system appears to play in chemical dependency among young people, the goal of the present study was to explore the relationship between dysfunctional families and symptoms of alcoholism among college students.

METHOD

Sample

The data for the study were collected at a midwestern university with an undergraduate population of approximately 7,000 students. The sample included students enrolled in courses offered by the depart-

ments of criminal justice, biology, mathematics, social work, and sociology. A total of 209 students participated in the study (43% males and 57% females). Eighty-five percent of the students were Caucasian; 15% were from minority groups. Eighty-five percent of the sample reported that they consumed alcohol, a percentage similar to that found at other universities (Pardeck, 1991). Fifteen percent indicated that they did not consume alcohol.

Instrument

The Michigan Alcoholism Screening Test (MAST) was administered to the participants. It consists of 25 items and has satisfactory reliability and validity (Selzer, 1971). The instrument is designed to identify symptoms of alcoholism. Scores of 5 or above on the MAST indicate that the potential for alcoholism is present. For purposes of this study, a score ranging from 0 to 4 was classified as *low* potential for alcoholism; a score of 5 or above was considered *high* potential.

Variables

The respondents completing the MAST were asked to identify their race, gender, how often they consumed alcohol, and whether their family of origin was intact or nonintact. The intact family was defined as both parents present in the family of origin; the nonintact family was defined as one parent absent from the family of origin. Nearly one-third of the students came from nonintact families of origin. Respondents also were asked to indicate the degree of perceived conflict in their family of origin, classified as either low, medium, or high.

FINDINGS

Initial bivariate analysis of the data revealed that students' gender and race were not significantly related to their MAST scores. The findings did indicate that family structure ($\chi^2 = 7.45, n = 208, p < .05$) and family conflict ($\chi^2 = 7.23, n = 205, p < .05$) were significantly related to students' MAST scores. The relationship between frequency of alcohol consumption and students' MAST scores approached statistical significance ($\chi^2 = 7.20, n = 206, p < .06$).

The next step was to conduct a multiple regression analysis of the variables. Appropriate coding techniques were used in preparing the nominal-level family structure variable for analysis. MAST score was treated as the dependent variable, and frequency of alcohol consumption, family structure, and family conflict were the independent variables.

TABLE 1
 MULTIPLE REGRESSION
 ANALYSIS OF THE POTENTIAL
 FOR ALCOHOLISM AMONG COLLEGE STUDENTS
 N=205

INDEPENDENT VARIABLES	ZERO-ORDER CORRELATION	BETA WEIGHTS
Frequency of Alcohol Consumption	-.07	.05
Family Conflict	.28*	.21**
Family Structure	.18*	.08

R² = .07 F test for R² p<.01
 *p<.01 **p<.01
 Beta Weights = Standardized regression coefficient

Table 1 shows the results of the multiple regression analysis. The zero-order correlations of family structure and family conflict with students' MAST scores were statistically significant. This finding suggests that these two family factors were related to the potential for alcoholism in the student population surveyed. No statistically significant relationship was found between frequency of alcohol consumption and the students' MAST scores.

The beta weights permitted a comparison of the effects of each variable on the potential for alcoholism. The beta weights indicated that the initial statistically significant relationship found between family structure and the potential for alcoholism was not present in the multiple regression analysis. However, multiple regression analysis did reveal a significant low positive relationship between family conflict and the potential for alcoholism. This important finding indicates that the students from families of origin which were perceived as having high levels of conflict also had a tendency to score higher on the MAST. It should also be noted that R² for the multiple regression analysis was statistically significant, but explained only seven percent of the total variance.

SUMMARY AND IMPLICATIONS

The findings of this research lend partial support to the importance of the family system as a factor in alcoholism. The multiple regression analysis illustrated a low positive relationship between perceived family conflict and the potential for alcoholism. The initial analysis of the data also indicated that family structure appeared to be related to elevated MAST scores. However, this relationship did not hold when multiple regression analysis was conducted on the data.

These findings suggest a link between the troubled family system and the potential for alcoholism in college students. It is important to note that perceived family conflict was the factor found to be related to elevated MAST scores; however, the relationship was not particularly strong. Even though this finding provides tentative support for the connection between the family system and the potential for alcoholism in family members, more research is needed on this important subject.

REFERENCES

- Ackerman, N. J. (1980). The family with adolescents. In E. A. Carter & M. McGoldrick (Eds.), *The family life cycle: A framework for family therapy* (pp. 147-169). New York: Gardner.
- Bateson, G., Jackson, D., Haley, J., & Weakland, J. (1956). Toward a theory of schizophrenia. *Behavioral Science, 1*, 251-264.
- Ben-Yehuda, N., & Schindell, B. (1981). The addict's family origin: An empirical survey analysis. *International Journal of the Addictions, 16*, 273-282.
- Haley, J. (1973). *Uncommon therapy*. New York: W. W. Norton.
- Jackson, D. (1957). The question of family homeostasis. *Psychiatric Quarterly, 31*(Suppl., Pt. 1), 79-90.
- Johnston, L., Bachman, J. G., & O'Malley, P. M. (1981). *Drugs and the nation's high school students: Five year national trends, 1979 highlights*. National Institute on Drug Abuse. Washington, DC: U.S. Government Printing Office.
- National Institute on Drug Abuse. (1979). *Drug abuse warning network: 1979 dawn annual report*. Washington, DC: U.S. Government Printing Office.
- Pardeck, J. T. (1981). The current state and new direction of family therapy. *Family Therapy, 8*(1), 21-27.
- Pardeck, J. T. (1988a). An ecological approach for social work practice. *Journal of Sociology and Social Welfare, 15*, 133-142.
- Pardeck, J. T. (1988b). Social treatment through an ecological approach. *Clinical Social Work Journal, 16*, 92-104.
- Pardeck, J. T. (1989). Family therapy as a treatment approach to child abuse. *Family Therapy, 16*(2), 113-120.
- Pardeck, J. T. (1991). Using books to prevent and treat adolescent chemical dependency. *Adolescence, 26*(101), 201-208.
- Pardeck, J. A., & Pardeck, J. T. (1990). Family factors related to adolescent autonomy. *Adolescence, 25*(98), 311-319.

- Peterson, R. C. (1980). *Marijuana research finding: 1980*. Rockville, MD: National Institute on Drug Abuse Monograph Series No. 31.
- Preli, R., Protinsky, H., & Cross, L. (1990). Alcoholism and family structure. *Family Therapy, 17*(1), 1-8.
- Selzer, M. L. (1971). The Michigan Alcoholism Screening Test: The quest for a new diagnostic instrument. *American Journal of Psychiatry, 127*, 89-94.
- Skynner, A. (1981). An open-systems, group-analytic approach to family therapy. In A. S. Gurman & D. P. Kniskern (Eds.), *Handbook of family therapy* (pp. 39-84). New York: Brunner/Mazel.
- Stanton, M. (1978). The family and drug misuse: A bibliography. *American Journal of Drug and Alcohol Abuse, 5*, 151-170.
- Steinberg, L. (1985). *Adolescence*. New York: Knopf.
- Timasheff, N. S. (1967). *Sociological theory: Its nature and growth*. New York: Random House.
- Vaillant, G. (1966). Twelve-year follow-up of New York narcotic addicts: I. The relation of treatment to outcome. *American Journal of Psychiatry, 122*, 727-737.
- Wechsler, H. (1979). Patterns of alcohol consumption among the young: High school, college, and general population studies. In H. Blane & M. Chafetz (Eds.), *Youth, alcohol, and social policy*. New York: Plenum Press.
- Wilson, C., & Oxford, J. (1978). Children of alcoholics: A report of preliminary study and comments on the literature. *Journal of Studies on Alcohol, 39*, 121-142.