ADOLESCENT SUBSTANCE USE AND FAMILY DYNAMICS

by

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Abstract

The purpose of this research project was to explore the family structural variables of cohesion and adaptability as well as extracurricular activities, peer influences, and personal attitudes as they were manifested in adolescents classified as nonusers, users, and/or abusers of alcohol/drugs. Two hundred and thirty-seven adolescents responded to written questionnaires including the Alcohol and Drug Use Index, a reduced form of the Family Adaptability and Cohesion Evaluation Scales (FACES III), the Student Attitude and Behavior Questionnaire, and a Demographic Questionnaire. Information was obtained on age and grade level, gender and ethnicity, parental characteristics, and student's educational aspirations in an effort to identify factors associated with teenage alcohol/drug use. Some of the major findings suggested that the users/abusers groups reported less involvement with their families, educational pursuits, and extracurricular activities when compared to their nondrug using counterparts. The statistical analysis also

confirmed some aspects of structural family therapy theory and refuted other aspects. The results of this study were also compared to prior research on adolescent substance use. These results further expanded the understanding of factors associated with adolescent use/abuse of alcohol/drugs.

DEDICATION

I would like to express my love and appreciation to my dear wife, "Maggie", whose tireless and unstinting patience, encouragement, and support during all phases of this project are frankly beyond my ability to requite.

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CHAPTER I

Introduction

The nature and extent of adolescent drug use has been a topic of much debate in the literature. While some people believe that adolescent drug use, especially alcoholism, is on the rise, others report no significant increase in drug use among adolescents (Blake, 1979; Johnston, et al., 1985). There is some evidence to suggest that both sides have a point. Teenage alcoholism does not appear to be as widespread as reported in some popular magazines: the use of certain kinds of illicit drugs (heroin) seem to have decreased while others, such as cocaine and Phencyclidine (PCP) have increased (Blane and Chafetz, 1979). According to the National Institute on Drug Abuse's national probability sample of 7,224 households in the United States, 8% of the 12-13 year olds, 32% of the 14-15 age group, and 51% of the 16-17 year olds had reported use of marijuana in 1979 (Fishburne et al., 1979). The NIDA survey has also shown that current drinking, defined as "drank in the past month," has increased to 20% among the 12-13 year olds, 36% among 14-15 age group, and 55% among the 16-17 age group (Fishburne et al., 1979).

Several authors have noted that there is a gender difference in regard to the frequency of use (Ensminger et al., 1982). In general, these authors conclude that rates of initiation to drugs follow parallel patterns among

of initiation to drugs follow parallel patterns among adolescent females and males. Males, however, generally initiate use at higher rates and continue to increase at faster rates than females, with the exception of the prescribed psychoactive substances.

In an effort to understand the etiology of adolescent drug use, a number of researchers have assessed the psychological well-being of adolescent drug users as compared with nondrug users. Studies investigating differences between users and nonusers have generally found that psychopathology predated adolescent drug use (Pittman et al., 1971; Hartmen, 1969; Welpton, 1968; Brock et al., 1976; Crockett, 1971).

The research on the relationship between school experiences in childhood and adolescent drug use has produced mixed results. Several researchers have attributed an independent effect to school failure as a predictor of drug use (Robinson, 1980; Anhalt & Klein, 1976; R. Jessor & S.L. Jessor, 1977; Kandel et al., 1978; Johnston, 1973; Smith & Fogg, 1978; Holmberg, 1985). A second school factor related to drug use is a low degree of commitment to education. Students who are not committed to educational pursuits are more likely to engage in drug use (Hirshi, 1969; Elliot & Voss, 1974; Kim, 1979; Friedmor, 1983; Galli & Store, 1975; Robins, 1980; Brooks et al., 1977; Holmberg, 1985).

Association with drug using peers during adolescence is among the strongest predictors of adolescent drug use (Akers, 1977; Elliot et al., 1982; Jessor et al., 1980; Kandel, 1982; Forster, 1984; Kandel et al., 1978). Drug behavior and drug related attitudes of peers are among the most potent predictors of drug involvement (Kandel, 1978). Jessor et al. (1980) found that perceived environmental predictors (such as friends as models for use) accounted for twice the variance in drug use as compared to personality factors.

Clinicians and researchers are also interested in family relationships and adolescent drug use. The evidence which does exist suggests a relationship between the family and the use of alcohol and drugs among adolescents. Among these are frequent signs of hostility in the family (MacKay, 1961); adolescents' perception of the family (Jessor & Jessor, 1974; Streit & Oliver, 1972; Street, Halstead, & Pascale, 1974) and family interaction (Babst et al., 1978; Gantman, 1978). Several studies have utilized clinical samples (Rus & Wilborn, 1983; Weidman, 1983; MacKay, 1961) of reported drug using adolescents and their families, but this evidence is nonempirical and cannot be utilized by educators as the basis of justification of family therapy for families of adolescents using drugs.

It would appear that the dynamics of the family environment have effects on the etiology of adolescent drug

use. However, the evidence is mostly nonempirical and there exists no studies applying family systems theory to the symptomatic behavior of the adolescent who uses drugs. While the literature on adolescent alcohol and drug use has stressed the importance of the family atmosphere as an etiological factor, there has been a paucity of empirical research supporting these claims. Previous studies have not fully explored drug using versus nondrug using adolescents' perceptions of family environments.

Purpose

One purpose of this study was to examine the relationship of early adolescents' perceptions of their family system to drug use. A second purpose was to investigate the frequency and type of drug use and its relationship to the adolescents' perceptions of the family system.

Finally, this study examined the relationship of early adolescents' perceptions of attitudes, activities, and peer influences to drug use and nonuse.

Theoretical Rationale

Part of this study was designed to explore the relationships between the family structural variables of adaptability and cohesion as manifested in families with drug using versus nondrug using adolescents. Specifically,

the theoretical framework for this study is structural family therapy theory (Haley, 1976; Madanes, 1981; Minuchin, 1974). From the perspective of family systems theory, family interactional characteristics and patterns, rather than individual personalities, are the focus of attention.

Minuchin (1974) described the stability in dysfunctional families as a rigid commitment to maintaining the status quo through repetitious transactional patterns. Olson et al. (1979) used the term "adaptability" to refer to the ability of a family to change in response to situational and developmental stress. Families may range on the adaptability continuum from rigid to structured and flexible to chaotic. The polar extremes of rigid and chaotic are proposed to characterize dysfunctional family systems. In rigid families there is an inability to accommodate needed change. In chaotic families, change is radical, unorganized, and unstructured. Families that are classified as structured and flexible maintain a balance between morphostatis (system-maintaining or stability) and morphogenesis (system altering or change). Balanced families are hypothesized to have a mutually assertive style of communication, egalitarian leadership, successful negotiation, role sharing, and rule making with less implicit rules and more explicit rules. Although drug using families are theorized to be rigid or chaotic with

dysfunctional interaction patterns (Blum, 1972; Braucht et al., 1973; Stanton & Todd, 1979), empirical validation has been limited.

Boundary is a structual concept which refers to the family's rules for who participates in what interaction and how. In normal families, boundaries are proposed to be "clear", allowing each subsystem within a family to function autonomously, yet with interdependence. Olson et al. (1979) defined the degree of emotional bonding and autonomy as "family cohesion". At one polar extreme of cohesion is enmeshment which is characterized by excessive closeness and restricted individual autonomy that prevents individuation of family members. At the opposite polar extreme of cohesion is disengagment which is distinguised by little attachment or commitment to the family. Stanton and Todd (1979) and Ziegler-Driscoll (1979) suggest that familial risk in drug using families includes a pattern of overinvolvement by one parent and distance or permissiveness by the other. Similarly, families with drug using adolescents are described by Kaufman and Kaufman (1979) as ones in which fathers are "disengaged" and mothers are "enmeshed". Further, Amers (1986) theorized that chemically dependent families are often socially isolated from the community, partly because of their need to maintain protective boundaries, and partly because of community rejection. Similarly, Hindman (1976) proposed

that drug using families maintain rigid external boundaries which isolate the system from society.

Given the theoretical importance of cohesion and adaptability to family functioning it is assumed that families with a drug using adolescent would differ on these characteristics from normal families. It is hypothesized that drug using families would report lower levels of family satisfaction indicative of poor family functioning Drug using families are also expected to be categorized at the extremes of cohesion and adaptability more often than families with nondrug using adolescents.

Some areas of this study have not previously been researched with families with identified drug using adolescents, components of the research were therefore exploratory in nature. This study therefore posited the following research questions:

1. Do drug using, drug abusing, and nondrug using adolescents differ in their perception of their family cohesion?
2. Among the groups (drug using drug abusing, and nondrug using), do adolescent males and females differ in their perception of their family cohesion?
3 Is there an interaction between group membership (drug using/abusing vs. nondrug using adolescents) and gender on the reported levels of family

cohesion?

4. Do drug using drug abusing, and nondrug using adolescents differ in their perception of their family adaptability?

5 Among the three groups (drug using, drug abusing, and nondrug using), do adolescent males and females differ in their perception of their adaptability?

6 Is there an interaction between group membership (drug using/abusing vs nondrug using adolescents) and gender on the reported levels of family adaptability?

7. Is there a difference in the reported levels of extracurricular activities among drug using, drug abusing, and nondrug using adolescents?

8. Is there a difference in the reported levels of peer/community influences among drug using, drug abusing, and nondrug using adolescents?

9 Is there a difference in the reported levels of personal attitudes among drug using, drug abusing, and nondrug using adolescents?

CHAPTER II

Literature Review

Nature and Extent of Adolescent Drug Use

Obtaining an accurate figure for teenage drug use is difficult. Most of the surveys on adolescent drug use have been conducted on high school seniors. Data from the 1979 Highlights on Drugs and the Nation's High School Students: Five Year National Trends (Johnston et al., 1979) indicated some alarming trends. Over 16,000 high school seniors were sampled. In general, 65% reported illicit drug use at some time in their lives. Marijuana use constituted a significant proportion of student's drug use. Over one-third of the seniors (37%) reported using an illicit drug other than marijuana. The use of other illicit drugs included hallucinogens, cocaine, heroin or other opiates, stimulants, sedatives, or tranquilizers not under a doctor s orders. After marijuana, stimulants constituted the most widely used class of illicit drugs (Johnston et al., 1979).

A number of studies concerning the use of alcohol, marijuana, and other substances by teenagers have indicated that there is a gender difference in regard to the frequency of use. Extrapolating from the Johnston et al. (1979) data, more males (58.4%) than females (46.9%) used illicit drugs. Females, however, showed an increasing use

of illicit drugs. Approximately equal proportions of males (29%) and females (26%) used marijuana at least once during the 1979 year. More males (9.6%) than females (4.0%) reported the frequent use of alcohol.

Ensminger et al. (1982) explored gender differences in substance use from a social adaptation/social bond perspective. The sample consisted of 705 first-graders of Woodlawn (a poor black Chicago neighborhood) who were assessed in first grade and reassessed ten years later. They found early aggressiveness and early shyness to be related to later substance use for males, but not for females. For males, peer attachment and school bonds were of primary importance; for females, family bonds and school were most important. Teenagers with strong social bonds at home and school are not as likely to be substance users as those with weaker bonds (Ensminger et al., 1982). Strong peer bonds seem to enhance use. Gender differences in the strength of social bonds did account for some of the differences in substance use, but major differences still remain unexplained. The authors concluded that the developmental paths leading to substance use by females are the same as those for males.

In general, rates of initiation to drugs follow parallel patterns among adolescent females and males. Males, however, generally initiate at higher rates and continue to increase at faster rates than females, with the

exception of the prescribed psychoactive substances. Those drugs are the only ones for which females show consistently higher rates of initiation than males.

Correlates of Drug Use

Opportunity is an important factor in the process of beginning illicit drug use by adolescents. The typical potential user does not seek out the chance to try an illicit drug, but rather an acquaintance with a user precedes the first experience. Most persons do not take advantage of the first opportunity to try an illicit drug (Miller and Crisin, 1980). Many who forgo that first opportunity, however, do try the drug at a later time. Apparently, if contact is maintained with friends who are users, the person gradually comes to accept the use as an excusable behavior for himself. Miller and Crisin (1980) add that opportunity is strongly related to age. Young adults 18-25 years of age are more likely to have the opportunity to try an illicit drug. These authors also found only small differences in the use of illicit drugs among various racial and socioeconomic groups, indicating that use has spread throughout most groups of young people.

Trouble with the law and juvenile delinquency are also characteristics associated with drug users. Cockett (1971) found that 71% of the drug users in his study were involved with delinquency at the time of or before their use of

drugs.

Early antisocial behavior has been found to predict adolescent substance use (Robins, 1978; Johnson et al., 1978; Kandel et al., 1978; Wechsler & Thum, 1973). In their sample of 1,242 urban, black first-grade students, Kellam and Brown (1982) found a positive correlation between first-grade male aggressiveness and the frequency of substance use 10 years later. Rebelliousness in children also is correlated with initiation of drug use (Smith & Fogg, 1978). Early aggressiveness and irritability is associated with later substance use (Lewis, Robins, & Rice, 1985; Nylander, 1979).

In summary, the evidence of a positive relationship between childhood antisocial behavior and subsequent drug use is relatively consistent (Kandel, 1982; Steffenhagen et al., 1972; Mellinger et al., 1975).

A number of researchers have dealt with the psychological well-being of adolescent drug users as compared with nondrug users. Studies investigating differences between users and nonusers have generally found that psychopathology predated adolescent drug use. Pittel et al. (1971) analyzed the developmental factors of 250 young people, 15-17 years old, involved in the Haight-Ashbury Research Project. These investigators found that drug using adolescents had gross deficits in their ego functioning.

Hartmann (1969) studied the drug taking behavior of high school adolescents, 16-17 years old, and found that eight of ten drug taking adolescents were significantly depressed before taking drugs. Welpton's (1968) study of chronic LSD users found that users had major difficulties with sexual identification, dependency needs, and control of aggression. On the whole, evidence of psychopathology has been found in the adolescent drug user, while the nonuser tends to manifest behavior much closer to that of his or her normal contemporaries.

The research on the relationship between school experiences in childhood and adolescent drug use produced mixed results. Several researchers have attributed an independent effect to school failure as a predictor of drug use (Robins, 1980; Anhalt & Klein, 1976; R. Jessor, 1976; Brooks et al., 1977; Galli & Store, 1975). Poor school performance is a common antecedent of initiation into drugs (R. Jessor & S.L. Jessor, 1977; Kandel et al., 1978; Johnston, 1973), and has been found to predict subsequent use and levels of use of illicit drugs (Smith and Fogg, 1978). Holmberg (1985) reported that truancy, placement in a special class, and early dropout from school were prognostic factors for drug use in a longitudinal study of 15-year olds. Drug users appear to perform more poorly in junior and senior high schools than do nonusers (Kelly & Bolch, 1971; Polk, Frease, Richmond, 1974; Frease, 1973;

Senna Rathos, & Siegel, 1974; Simon, 1974; Anhalt & Klein, 1976; R. Jessor, 1976), although this relationship has not been found among college students (Miranne, 1979). Robins (1980) characterizes drug users as having average or better I.Q.'s but being underachievers.

A second school factor related to drug use is a low degree of commitment to education. Students who are not committed to educational pursuits are more likely to engage in drug use (Hirshi, 1969; Elliot & Voss, 1974; Kim 1979; Friedman, 1983; Galli & Store, 1975; Robins, 1980; Brooks et al., 1977; Holmberg, 1985). The annual surveys of high school seniors by Johnston et al., (1985) show that the use of hallucinogens, cocaine, heroin, stimulants, sedatives, or nonmedically prescribed tranquilizers is significantly lower among students who expect to attend college. Drug users are more likely to be absent from school, to cut classes, and to perform poorly than nonusers (Brooks et al., 1977; Kandel, 1982; Kim 1979). Factors such as how much students like school (Kelly & Balch, 1971), time spent on homework, and perception of the relevance of coursework also are related to levels of drug use (Friedman, 1983), confirming a negative relationship between committment to education and drug use among junior and senior high school students.

Association with drug using peers during adolescence is among the strongest predictors of adolescent drug use

(Akers, 1977; Elliot et al., 1982; Jessor et al., 1980; Kandel, 1982; Forster, 1984). Drug behavior and drug related attitudes of peers are among the most potent predictors of drug involvement (Kandel, 1978). Peer influences are particularly important for initiation into the use of marijuana (Kandel et al., 1978). Jessor et al. (1980) found that perceived environmental predictors (such as friends as models for use) accounted for twice the variance in drug use as compared to personality factors.

There are other variables worthy of study concerning adolescent substance use. On a regional basis, there are not significant differences. In general, however, substance use is more prevalent in the Northeast sector of the nation than anywhere else, with lower rates usually occurring in the South (Johnston et al., 1980).

As for population density, the figures (Johnston et al., 1980) are fairly predictable: illicit drug use is highest in the metropolitan areas and lowest in the rural or nonmetropolitan areas. Marijuana shows the largest difference, with a 56% rate in large metropolitan areas as opposed to 42% in rural areas. There seems to be little association with urbanicity with respect to use of prescribed tranquilizers, sedatives, and stimulants.

Family Influences/Factors--Non-Empirical Literature

The impact of the family in the genesis, maintenance,

and alleviation of drug use is gaining recognition and credibility (Coleman, 1980). Observations on families of youthful drug users report an abundance of disturbed and emotionally dislocated families (Rosenberg, 1969), inappropriate or dysfunctional interaction patterns (Blum, 1972; Braucht et al., 1973) and an increased incidence of other deviant behavior by children (Adams et al., 1983). Gorsch and Butler (1976) note that family relationships appear to play a critical role in determining subsequent drug use and point out that "parental rejection and either under or over domination by the parents are critical" (Gorsch & Butler, 1979, p. 124).

Drug abusing families are often multiproblem families that have considerable stress in their lives. Such families are often socially isolated from the community partly because of their need to maintain protective boundaries (Ames, 1986) and partly because of community rejection. As a result of social isolation and decreased social network (Fraser & Hawkins, 1984a), these families receive little help and support from others with their problems, which could increase their family stress. Similar to the insular families described by Wahler, Leske, and Rogers (1979), these families either do not try to make friends in the community or feel that they cannot have traditional friends, and were less involved in recreational, social, religious, and cultural activities.

Decreased involvement with community and religious institutions has been found as one of the psychosocial precursors of drug use (Tennant, Detels, & Clark, 1975). Due to the family's social isolation, the children of chemically dependent homes are unusually isolated and lonely.

Kumpfer and DeMarsh (1984) state that children in these isolated families have fewer opportunities to interact with other children, have fewer friends they can tell secrets to, and bring friends home less often. The children complain about being lonely, while the parents complain that the children are too dependent on them. These children are hampered in social development by the constraints of sharing "family secrets" without betraying the family. Since sharing secrets is a major act of developing intimacy and friendship, this constraint further isolates the children's lack of friends, and often contributes to low self-esteem, which is predictive of drug use in adolescents (Kaplan, 1977).

Reilly (1976) has reported, from clinical observations, nine dysfunctional family interaction patterns amongst drug using families. The interaction patterns include the following:

1. Negative interaction is typical. Family members give negative messages when they do communicate (e.g., criticisms, put-downs, complaints, and

nagging).

2. Parents provide inconsistent limit setting or structuring.
3. The substance user issues a cry for help or attention, advertising drug use and related problems as a way of getting some particular response, structuring, or limit setting by parents.
4. Global or massive parental denial is seen, e.g., parents manage not to see what is going on, either the evidence of substance use of accidents or other signs that the problem is getting worse.
5. Offspring who use drugs provide some vicarious gratification that parents need, either consciously or unconsciously.
6. Drugs and alcohol are used as self medication or as disinhibitor by substance using member who needs this aid for expressing or acting out certain reactions, feelings (e.g., destructiveness, violence).
7. Parents and children have difficulty in expressing anger between themselves (unexpressed rage). There is not appropriate continuum of expression, resulting in either no expression or violence.
8. Parent's expectations of the substance using child, who is perceived (represents or symbolizes)

as either a good or a bad image of a grandparent or relative of the parent and is not seen as a real person for himself or herself, are pathogenic.

9. "Incredible language" is common. Family members make statements, e.g., promises about their behavior in the future, that are so unrealistic they cannot be believed. These individuals don't mean what they say.

Other clinicians have compiled factors distinguishing substance using families from other families. Among these factors are lack of cohesion and attachment (Vaillant & Miloutskey, 1982); emotional neglect (Booz-Allen & Hamilton, 1974; Street, 1973; Henoin, Pollinger, Ulman, & Carr, 1981); and family conflict (Booz-Allen & Hamilton, 1974; Vaillant & Miloutsky, 1982; Black, 1982; Wegscheider, 1981; Ackerman, 1983; Moos, Bromet, Tsu, & Moos, 1979).

Kaufman and Kaufman (1979) have compiled a list of seven most frequently asserted clinical and theoretical speculations regarding the family system characteristics of families with adolescent drug use members. They include the following:

1. Drug user is the symptom carrier for the family dysfunction.
2. The addict helps to maintain the family homeostasis.

3. The using member reinforces the parental need to control and continue parenting yet finds such parenting inadequate for his or her needs.
4. The user provides a displaced battlefield, so that implicit and explicit parental strife can continue to be denied.
5. Parental drug and alcohol use is common and is directly transmitted to the adolescent user or results in inadequate parenting.
6. The user forms cross-generational alliances that separate parents from each other.
7. Generational boundaries are diffuse--there is frequently competition between parents.

Frequently, the crisis treated by the drug using member is the only way the family gets together and attempts some problem solving or is the only opportunity for a "dead" family to experience emotions.

Adolescents in such families may accurately perceive that the drug use insures ongoing family crisis and, if discontinued, may result in neglect by the family or a decrease in the adolescent's importance and centrality in the family. The stirring up of the family by the drug user who comes home stoned, gets into trouble at school, steals, overdoses, or gets arrested, and thereby becomes the family scapegoat, may represent an attempt to secure and maintain

family interest and involvement, albeit negative.

Reilly's (1976) six characteristic conflict themes are: (1) attachment and separation; (2) ego diffusion (undifferentiated family mass, symbiosis) and individuation; (3) dependency and autonomy; (4) nuturance and deprivation; (5) control, leadership, limit setting vs. freedom, permissiveness; and (6) loss and restoration, death and rebirth.

These patterns and themes are not necessarily unique or specific to substance using families but are observed to occur more regularly and in more extreme or intense form in such families. The possibility also exists that clinicians may either observe such patterns and themes in families or may elicit them or read them into families.

Anerswald (1980) stated that he could not recall, from his many years of working with families, "a single, openly communicating, mutually respecting, well-organized, lovingly close family in which an actively participation member had a serious lasting drug habit" --possibly only transient experimentation with occasional alcohol or marijuana. He recommended social programs to support family life and the construction of family networks.

Stanton (1980), in his literature review, reports how the other family members behave in a way to keep the drug user in a dependent, incompetent role or to undermine his or her self-esteem. Some clinical observers have

speculated that, in spite of the fact that the parents and other family members have many difficulties and much suffering related to the adolescent member's drug use, they paradoxically need this drug using behavior to maintain the homeostasis of the type of family system to which they are accustomed. For example, the involvement of the parents, in drug using problems may serve to distract from the fact that they are emotionally divorced from each other or that they have an intensely conflictual marriage. The wife, who fears that her husband will leave her, may hope that the continuing family crisis created by their child's involvement in drug use will influence the husband to decide that he cannot leave.

Given the consistency of these observations, family management, communication, and role modeling represent risk factors to be included in theories of the etiology of adolescent drug intitiation and use. However, it should be mentioned that these reports are based primarily on clinical observations, and include no findings that are based on empirical research data.

Empirical Research--Family Factors

A few previous studies have shown a relationship between the family system and the use of alcohol and drugs among adolescents.

The earliest investigation of the psychosocial

characteristics of adolescents who misuse alcohol was done by Mackay in 1961. This was the investigation of 20 adolescents brought to a child guidance clinic. Mackay found that most of these problem drinkers believed that their drinking was done without their parents' knowledge. He also found that every one of the fathers had left the family before the identified patient reached adolescence. Some of the earliest childhood memories of the subjects were of very violent parental arguments.

In the personalities of these adolescents, Mackay found such things common as frequent signs of hostility in the family, lack of control over these adolescents, a basic feeling of anxiety, pervasive depression, unfulfilled dependent needs, impulse control was very weak, expectation of loss in all relationships, and the need to belong was very strong.

Jessor and Jessor (1974) studied the child-rearing practices of the mothers of 184 high school students along with the responses of these students to a questionnaire on alcohol use. Their results were that the more traditional the mother's ideology, the less the adolescents' involvement in alcohol use. Maternal affectional interaction and controls, when in correspondence to the maternal ideology, contributed most to the variation in adolescent problem behavior.

Street and Oliver (1972) surveyed 6,000 school children

between the ages 12-22 in Montgomery County, Pennsylvania. The child's perception of the closeness of his family was investigated and found to have a significant negative correlation with the incidence of marijuana, LSD, barbiturate, and ampehtamine use.

Street, Halstead, and Pascale (1974) compared the perceptions of their parents held by drug users and nonusers using an adaptation of Schaefer's scales. The sample consisted of 1050 children, grades 7-12, from three school districts in the middle Atlantic region. The four types of drugs studied were: marijuana, LSD, barbiturates, and amphetamines. Examination of the comparisons found to be significant indicated that the perception of love from both parents was consistently present among nonusers of the four drugs studied. Further, users of all the drugs except amphetamines perceived hostility from both parents. Finally, the granting of autonomy by parents when coupled with hostility was present in the perceptions of parents by drug users.

Anhalt and Klein (1976) surveyed a population of 3807 junior high school students (grades 8 and 9) in a suburban area. Results suggested that illegal drug sue appeared strongly correlated with the family instability, student personal problems, and low academic performance. Illegal users and nonusers agreed that drug education programs and the threat of legal penalities had little influence in

decisions about drugs.

Blechman et al. (1977) surveyed high school students (n = 3690) to assess how much of the unique variance in adolescents' self-reported drug use could be accounted for by number of parents and cause of parental absence as compared to other variables (age, peer use, sex) associated with adolescent drug use. Multiple regression revealed that the contribution of number of parents was small (.09), and insignificant compared to peer use, student age, parental occupation and remarriage, student sex, and parental unemployment. No relationship emerged between peer drug use, number of parents, or cause of parent absence once variables making larger, significant contributions to variance were partialed out.

Babst et al. (1978) studied the relationship between youths' attitudes toward their family and their drug use. The study was based on a representative sample of 8,553 public school students (grades 7-12) in New York State. A concise index of family affinity (closeness) was developed. Family affinity was found to be positively related to students' interest in school and whom they would go to for help with a drug problem. Family closeness was negatively related to willingness to take risks, friends' use of drugs, and students' own drug use. Family closeness was not related to family composition or socio-economic level.

Gantman (1978) designed a study to determine whether

family interaction patterns differed significantly among three groups of families defined according to the adolescent offspring's symptoms. Thirty families were selected and divided into three subsamples in relation to the presenting behaviors of the adolescents. The three subsamples included families with a normal adolescent (n = 10), families with a drug using adolescent (n = 10), and families with an emotionally disturbed adolescent (n = 10). The results established that the three family groups did not differ demographically. A comparison of the two disturbed family groups yielded no significant differences. The normal group was significantly different from the other two groups in frequency of scapegoating of the adolescent and the ability to reach a decision. Additionally, the normal families reported clearer communication, more freedom of expression, more cooperation, and greater sensitivity among members.

Mercer et al. (1978) conducted a study to determine the evaluative dimensions of adolescents perceptions of the family as a unit and then to relate these dimensions to the use of tobacco, alcohol, and marijuana. A questionnaire was administered anonymously to 286 ninth grade students in a southern Ontario high school. Item intercorrelations were factored, and the six factors extracted were related to drug use behaviors using correlational and regression techniques. The factors extracted were: warmth, support

and interest, organization, disinterest, parents togetherness, unsocial (keeps to self), and general excitability. For the males, warmth, support and interest related negatively and significantly to the use of alcohol and tobacco. For the females, this factor related negatively and significantly to the use of all three drugs. For the females, unsocial (keeps to self) related negatively and significantly to the use of alcohol while disinterest related positively and significantly to the use of marijuana.

Weidman (1983) studied 14 inpatient residents and 27 parents and administered a boundary/fusion questionnaire. All residents had at least four years in length. The study sought to explore the relationships among adolescent and parental levels of differentiation, adolescent beliefs about locus of control, and compulsive adolescent substance use.

Weidman concluded that although the findings may be due to chance, the findings and their interpretation suggest that family relationship among compulsive adolescent substance abusers suggest a trend. The study describes the fathers as being peripheral and distant while the mother is described as overinvolved and symbiotic with the drug user.

Rees and Wilborn (1983) studied 26 clinical inpatient drug using adolescents and their parents and 26 nondrug abusing adolescents and their parents. Their findings

indicated that the adolescents' self-esteem and perception of parental behavior, the ability of the parents to predict the child's parental perceptions, and the professed parental attitudes toward confidence and responsibility in child rearing all combine to suggest a set of factors differentiating the drug using adolescent from the nondrug using adolescent. The drug users were found to have more psychological symptoms: anxiety, hostility reactions, violent reactions, and less maturity than adolescents who did not use drugs.

McDermott (1984) examined the relationship of two variables, parental drug use and parental attitude toward adolescent drug use, as perceived by the adolescent respondent to his or her own use or nonuse of drugs. A sample of 106 drug using and 96 nondrug using adolescents was obtained through the use of the anthropological "snowball" technique. All respondents were administered a drug use history profile and a personal data questionnaire. In order to be classed as drug users, respondents had to have been using two or more recreational substances on a regular basis. Nondrug users were those who used no recreational drugs, although individuals who had tried alcohol or tobacco experimentally were included in this group. On the personal data form, respondents were asked to describe their parents' attitudes on use of alcohol, tobacco, or other substances, and to indicate their

parents' attitudes concerning adolescent use of drugs. Parental attitudes were classified as permissive if the respondent indicated the parents were indifferent about drug use, if they accepted a certain range of drugs, or if the decision were left up to the youth. A nonpermissive attitude was defined as one which would not accept drug use by the adolescent.

In addition to confirming that adolescents who use drugs are significantly more likely to have one or more parents who use drugs ($p = .0001$), the McDermott study showed, more importantly, that adolescents who perceive their parents as having permissive views about drug use by youths are significantly more likely to use drugs than those who perceive their parents as holding nonpermissive views ($p = .0001$). Furthermore, when substance use by parents is held constant, these differences remain significant ($p = .05$ and $p = .0001$), indicating that parental attitude, as perceived by the young person, is as important, or more so, than actual parent behavior in determining adolescent drug use.

Barnes (1984) studied a sample of 124 families having at least one adolescent between the ages of 12 to 17 years and at least one parent. Results of the study showed that both mother and father nuturance or support factors were related to adolescent deviance and alcohol abuse; that is, adolescents with a low level of problem behavior had high

nuturing mothers and fathers.

Hundleby and Mercer (1987) conducted a study that examined the role of family and friends in accounting for alcohol, tobacco, and marijuana use among young adolescents. The sample included 1,0008 males and 1,040 females with a mean age of 14.5 years. Lack of parental affection, concern, involvement, and modeling appeared to be central factors in the family's influence and accounted for 22% of the variance in drug use.

It seems then, that the studies mentioned, point to the family system as a very salient factor in the etiology of alcohol and drug use in adolescents. There appears to be a high level of anxiety in these families, and the adolescent is rather withdrawn from the family. For example, Stacey and Davies (1970) report that parental models are instrumental in shaping early attitudes and behavior with regard to teenage drinking. This study is in agreement with the data of Maddox (1970). Both studies found that parental modeling is essential in the development or lack of development of adolescent alcohol use. The converse of these findings has also been shown; for example, Mackay (1961) found that the family was the least influential aspect in the lives of the adolescents he studied who were problem drinkers. Tec (1974) also found that the family was the least salient paret of the lives of adolescents who use marijuana.

In conclusion, from the literature presented, it would appear that the dynamics of the family environment have profound effects on the etiology of adolescent drug use. However, no studies exist that apply family systems theory to the symptomatic behavior of the adolescent who uses drugs. Further, there exists a paucity of information with junior high students. Most of the surveys on adolescent drug use have been conducted on high school seniors or college students.

CHAPTER III

Methodology

Sample

The sample consisted of 237 middle school adolescents currently attending school in Montgomery County. Montgomery County is located in Southwestern Virginia. The sample for this study was divided into three groups: (1) adolescents who were identified as drug users; (2) adolescents who were identified as drug abusers; and (3) adolescents who were identified as nondrug users as reported by the Alcohol and Drug Use Index (Appendix B).

Procedure

Permission to recruit students to participate in this study was obtained from the appropriate administrators of the Montgomery County school district. (See Appendix C for the permission to conduct research letters). Parents of students were contacted by the students' teachers to request their participation in the study (See Appendix A for a copy of the Parental Consent Form). Students age 12 or older in the seventh and eighth grades were contacted to request their participation in the study. The age specification of 12 was established by Olson, Portner, and Lavee (1985) as the minimum age at which valid results on the FACES can be obtained, a primary instrument used in the

study. All students who agreed to participate were asked to complete an Alcohol and Drug Use Index (See Appendix B for a copy of the Substance Use Inventory). The Index was used to identify those students who reported using drugs versus students who identified themselves as nondrug users.

Each student completed a series of questions. The students each completed a Demographic questionnaire, the Alcohol and Drug Use Index, and the Family Adaptability and Cohesion Evaluation Scales (FACES III). Further, those students who identified themselves as nondrug using versus drug using/abusing adolescents completed separate questionnaires pertaining to their activity involvement, attitudes, and peer/community influences. Direction for completion of the questionnaires was standardized to eliminate potential bias. The students were asked to work independently in completing the questionnaires and not to consult with each other until they had finished. All completed questionnaires were returned and deposited in a sealed box, assuring participants of confidentiality. All students were asked to volunteer for participation in the study, therefore, no pressure was applied to solicit information. Their identity was not requested and they, therefore, were guaranteed anonymity.

Instrumentation

Family Adaptability and Cohesion Evaluation Scales (FACES)

The FACES were initially developed in 1978 by David H. Olson, Joyce Portner, and Richard Bell. FACES has since been revised twice. Olson et al. had designed FACES to measure the Circumplex Model which postulates that cohesion and adaptability are two central dimensions of marital and family structure. The model proposed that families located on the central (balanced) areas of the Circumplex Model are healthier than those at the polar extremes. A family system is considered balanced when it can experience the extremes on the dimensions when appropriate without becoming stuck at these extremes (Olson et al., 1979).

The original FACES, developed in 1978, was a self-report scale containing 111 items. The instrument measured family members' perceptions of family cohesion and adaptability. Scores were obtained on 9 subscales of cohesion and 7 subscales of adaptability. It was initially designed for use with couples and families with an adolescent (Olson et al., 1979). FACES was revised in 1981 to address the limitations of the original FACES. FACES II created a shorter scale with simplified sentences for use with children aged 12. The number of double negatives were reduced from the original instrument and a 5 point Likert response scale was added.

FACES III was developed primarily to improve reliability, validity, and clinical utility. The major objectives were: (1) to shorten the instrument so it can be administered under perceived and ideal conditions; (2) to develop two empirically independent (orthogonal)dimensions so it can better achieve the theoretical criteria for the Circumplex Model; (3) to eliminate negative items so it is easier to score and compare to established norms; (4) to rewrite the ideal version so that it could be more easily understood by family members; (5) to develop items that were relevant for a variety of family forms (nuclear, blended, single-parent) and couples (married, cohabiting) without children; (6) to have specific norms for adults across the life cycle, adults and adolescents combined for the adolescent stage, and young couples without children (Olson et al., 1985).

FACES III is a 20-item scale containing 10 cohesion items and 10 adaptability items. There are two items for each of the concepts related to cohesion: emotional bonding, supportiveness, family boundaries, time and friends, and interest in recreation. There are also two items for each of the following concepts on the adaptability dimensions: leadership, control, and discipline, and four items for the combined concept of roles and rules (Olson et al., 1985).

A concern of FACES I was bias due to social desirability. In FACES III, the correlation between adaptability ad social desirability was reported by Olson et al. (1985) to have been reduced to zero from .38 in FACES II.

A reduced version of FACES III was employed in this study. A 10-item scale containing 5 cohesion items and 5 adaptability items was utilized. (See Appendix B for a reduced copy of FACES III). The major objective to a reduced version was to shorten the instrument to reduce administration time and yet continue to measure two central dimensions of family structure.

Alcohol and Drug Use Index

The Alcohol and Drug Use Index is a 5-item, 6 point Likert, self-report instrument that addresses alcohol consumption and drug use. Its purpose is to distinguish between drug using and nondrug using individuals. Alcohol consumption and drug use measures gathered information on (1) the frequency of drinking and on the average number of drinks consumed; (2) the frequency of marijuana and illegal drug use. The item formats (See Appendix B for a copy of the Alcohol and Drug Use Index) that were used to obtain these data are similar to those reported by Barnes (1981) and by Harford and Spiegler (1983); and to studies

sponsored by the National Institute on Alcohol Abuse and Alcoholism (Rachel, 1975).

Selnow (1985) obtained a Cronbach's Alpha reliability of .88 with the Alcohol and Drug Use Index when administered to a sample of 3,759 students (1,952 males, 1,807 females) in the 6th through 12th grades.

Similarly, Selnow and Crano (1986) obtained an inter-item reliability coefficient of .77 with the same instrument when administered to a sample of 760 high-school students between the ages of 13 and 17 years.

Student Attitude and Behavior Questionnaire

A student questionnaire was created for the purpose of obtaining information and to provide a means of comparison between the two groups. (See Appendix B for a copy of the Students' Questionnaire). A description of each of the variables along with a short explanation of the rationale for including each variable appears below for each of the two groups.

Student Activities--Drug Using Group (Questions 6-15; 32-40. A description of the drug using students' extracurricular activities was obtained. Opportunity is an important factor in the process of beginning illicit drug use among adolescents. The research on the relationship between school experiences and adolescent drug use has produced mixed results. Further, association with drug

using peers during adolescence is among the strongest predictors of adolescent drug use (Akers, 1977; Kandel, 1982; Forster, 1984).

Family/Parent Activities (Questions 16-20; 30-31). These variables were selected because they indicate the family's social situation. Several authors (Reilly, 1976; Kaufman & Kaufman, 1979) have compiled a list of frequently asserted clinical and theoretical speculations regarding the family system characteristics of families with adolescent drug using members. Several studies (Stacey & Davies, 1970; Maddox, 1970; Tec, 1974) point to the family system as a very salient factor in the etiology of alcohol and drug use in adolescents.

Student Attitudes (Questions 21-23; 29 & 41). The relationship between student attitudes and substance usage is unclear. However, two studies (Pittle, et al., 1971; Hartmann, 1969) have found a positive correlation between aggressiveness, rebelliousness, and irritability and later substance use among adolescents.

Student Activities--Nondrug Using Group (Questions 32-40). A description of the nondrug using students' extracurricular activities was obtained to correlate with the drug using sample. Several studies have suggested that commitment to school, friends, and peers tend to be stronger amongst non-using adolescents (Robins, 1980; Kandel, 1982; Johnston et al., 1980; Jessor et al., 1980).

Family/Parent Activities (Questions 30-31). A description of the nondrug using students' perceptions of his/her family was obtained to compare with the drug using sample. Several authors (Kaufman & Kaufman, 1979; Slanton, 1980) report that family management, communication, and role modeling represent factors to be included in theories of the etiology of adolescent substance use.

Student Attitudes (Questions 24-29; 41). These variables were included because they indicate the students value on the future use of drugs and alcohol. A study by Rees and Wilborn (1983) indicate that nondrug using adolescents reported higher self-esteem as well as confidence toward achieving than did their drug using peers.

Demographic Questionnaire

A demographic questionnaire was created for the purpose of obtaining information and to provide a means of comparison between the two groups. (See Appendix B for a copy of the Demographic questionnaire). A description of each of the demographic variables along with a short explanation of the rationale for including each variable appears below.

Age, Grade, Sex, and Ethnic Background (Questions 52-55). The student's age, grade level, and ethnic background were obtained as descriptive data. Each student indicated their gender as further descriptive data. This variable

was also included because prior studies had indicated that boys use alcohol more than girls (Engs, 1982; Lassey & Carlson, 1979; Kohn & Annis, 1977). The 1982 National Institute on Drug Abuse Survey reports males typically use alcohol and a variety of illegal drugs more than females (Miller, 1983).

Parent's Marital Status, Living Arrangement, Family Compensation (Questions 56-59). These variables were selected because they indicate the family's structural and social situation. The literature in this area has shown that adolescent drug users tend to come from families that demonstrate more internal problems (Gottschalk et al., 1970). These authors further observed that drug using adolescents tend to come from broken homes with one parent or step-parent and are exposed to significant and conflicting differences between parents. However, while some researchers have reported that non-intact families predict subsequent drug use (Robins, 1980; Penning & Barnes, 1982; Stern et al., 1984) there is disagreement on this point.

Parent's Employment, Parent's Educational Status, Student's Free Lunch Status (Questions 60-62). The relationship between socioeconomic status and substance usage is unclear, although it appears from the few recent studies that have dealt with the issue, that there is a greater

substance involvement among adolescents of higher SES. Such a finding was reported by Butler (1982) for a sample of 7th and 8th graders. One of the apparent problems with much of this research involves measurement of SES. Despite the paucity of studies involving SES, there appears to be reason at least to consider the variable of students' free lunch status in the classification scheme. A clear relationship between SES and substance involvement would have implications for various school systems that may be in a position to focus attention on SES-identified subgroups. Therefore the variable school lunch status was included to identify students' SES and its relationship to possible substance use.

Student's Commitment to Education (Question 63). This variable was selected because it indicated the student s value on an expectation of achievement. Low valuing of achievement is correlated with initiation to drug use. A second school factor related to drug use is a low degree of commitment to education. Students who are not committed to educational pursuits are more likely to engage in drug use (Hirshi, 1969; Elliott & Joss, 1974; Friedman, 1983; Galli & Store, 1975; Robins, 1980; Brooks et al., 1977).

Data Analysis

Demographic Data. In analyzing the demographic data, frequencies and percentages were calculated for each of the

demographic variables by group membership (whether the adolescent was in the nonusers, users, or abusers group). The following demographic variables by group membership were reported: age and grade level, gender and ethnicity, parental characteristics, and student's educational aspiration.

Drug Use. Responses to the Alcohol and Drug Use Index were obtained for each adolescent who participated in this study. Alcohol consumption and drug use measures gathered information on: (1) the frequency of drinking and on the average number of drinks consumed; (2) the frequency of marijuana and illegal drug use. The following cutting points were used for classification of the three groups: nonusers--those individuals who reported no history of drug/alcohol use with the exception of the use of wine for religious purposes only; users--those individuals who reported drinking 1-4 glasses of beer, wine, and/or distilled liquor on a yearly basis and/or reported smoking marijuana or using other drugs on a yearly basis; abusers--those individuals who reported drinking 1-2 glasses of beer, wine, or distilled liquor on a monthly, weekly, or daily basis and/or reported smoking marijuana or using other drugs on a monthly, weekly, or daily basis.

Cohesion and Adaptability. Responses on a reduced version of FACES III were obtained for each adolescent age 12 or older on the cohesion scale and on the adaptability

scale. Measures of internal consistency reliability computed for the cohesion and adaptability scales were .55 and .60, respectively.

Perceived cohesion was measured by a reduced version of the FACES III. Responses to the five cohesion items were recoded such that extreme values of 1 or 5 were recoded as a 1 or 3 to represent an extreme response (1 = disengaged, 3 = enmeshed). The remaining scores within the balanced range (2, 3, or 4) on the cohesion continuum (separated/ connected) were assigned a value of 2. The recoded values were then averaged over the five cohesion items to obtain a cohesion score for each individual.

Similarly, the adaptability scores were used to classify each adolescent as rigid/chaotic or structured/ flexible according to the proposed norms and cutting points.

The Circumplex Model proposes that individuals located within the balanced ranges are healthier than those at the extremes. Accordingly, the cohesion and adaptability scores were used to classify the respondent as healthy or dysfunctional depending upon their classification. The mean scores, therefore, represent the cohesion and adaptability continuum for group membership, respectively. Although the trichotomous scores obtained in this manner represent nominal classifications, it is permissable to treat any trichotomous variable as though it represents an

interval measure. Therefore, it was possible to analyze this dichotomous variable using an ANOVA to test the significance of the differences between the means

Extracurricular Activities, Peer/Community Influences, Personal Attitudes. A student questionnaire was created for the purpose of obtaining information and to provide a means of comparison between the three groups. In analyzing this data, frequencies and percentages were calculated for each variable by group membership (whether the adolescent was in the nonusers, users, or abusers group). The Chi Square test of Independence was used when appropriate to test the significance of the relationship between student extracurricular activities, peer influences, personal attitudes, and group membership.

CHAPTER IV

Findings and Discussion

The Alcohol and Drug Use Index was used in order to classify the sample of adolescents according to their drug and alcohol use (Appendix B). This questionnaire was administered to 237 adolescents. Of the 237 respondents, 107 were classified as nonusers, 80 as users, and 50 as abusers. In addition, these three groups were administered a reduced form of the Family Adaptability and Cohesion Scale, a demographic questionnaire, and a Student Attitude and Behavior Questionnaire (Appendix B).

The primary purpose of this study was to compare the questionnaire responses of these three groups in an effort to identify factors associated with teenage alcohol/drug use.

Age and Grade Level

Although sampling was limited to seventh and eighth grade students, it appears that drug/alcohol use is largely restricted to eighth graders. As shown in Table 1, 42 of the 50 abusers were in eighth grade, whereas; nonusers were nearly evenly split between grade levels. Accordingly, the ages of the abusers is somewhat higher than the other two

Table 1

Crosstabulation Of Group Membership With Grades

	Nonusers	Users	Abusers	Totals
Seven	53 (49.5)	38 (47.5)	8 (16.0)	99 (41.8)
Eight	54 (50.5)	42 (52.5)	42 (84.0)	138 (58.2)
Totals:	107 (100.0)	80 (100.0)	50 (100.0)	237 (100.0)

groups. The mean ages were 14.Ø6 years for the abusers group 13-19 years for the users group, and 13-23 years for the nonusers group.

Gender and Ethnicity

Because 92.4% of the sample was white/Caucasian, it was not possible to make any inferences about ethnicity and use. Interpretation of Table 2 shows that abuse is greater among males than females even though the sample is 6Ø% female. These results appear to be consistent with previous studies, which suggest that proportionately more males than females abuse alcohol/drugs (Johnston et al., 1979; Ensminger et al., 1982). A further analysis suggests that when combining the users/abusers groups, approximately equal proportions of males (53%) and females (56%) report use of drugs and alcohol. This appears to suggest females show an increasing use of illicit drugs.

Parental Characteristics

The marital status of the parents appears to be related to use. Table 3 shows that approximately 75% of the nonusers report that their parents are married but approximately 5Ø% of the abusers report that their parents are married.

Table 2

Crosstabulation Of Group Membership With Sex

	Nonusers	Users	Abusers	Totals
Male	44 (41.1)	28 (35.0)	22 (44.0)	94 (39.7)
Female	63 (58.9)	52 (65.0)	28 (56.0)	143 (60.3)
Totals:	107 (100.0)	80 (100.0)	50 (100.0)	237 (100.0)

Table 3

Crosstabulation Of Group Membership With Parents' Marital Status

Mother's Marital Status	Nonusers	Users	Abusers	Totals
Married	80(74.8)	54(67.5)	26(52.0)	160(67.5)
Divorced	17(15.9)	15(18.8)	20(40.0)	52(21.9)
Other	10(9.3)	11(13.7)	4(8.0)	25(10.6)
Totals:	107(100.0)	80(100.0)	50(100.0)	237(100.0)

Father's Marital Status	Nonusers	Users	Abusers	Totals
Married	80(74.8)	50(62.4)	28(56.0)	158(66.7)
Divorced	18(16.8)	15(18.8)	19(38.0)	52(21.9)
Other	9(8.4)	15(18.8)	3(6.0)	27(11.4)
Totals:	107(100.0)	80(100.0)	50(100.0)	237(100.0)

These results appear consistent with a previous study by Barnes (1984) which showed that both mother and father support were related to adolescent alcohol abuse, that is; adolescents with a low level of substance use behavior had high nuturing mothers and fathers.

It also appears that the educational levels of the parents of the three groups differ, with higher levels of educational attainment among parents of nonusers. Table 4 shows this relationship.

The employment status of the parents also differ somewhat across the three groups with nonusers reporting 89% of their fathers employed full time versus only 74% of the abusers group reporting their fathers holding full time employment. A complete breakdown is shown in Table 5. Because the employment status of the mothers amongst the three groups was nearly evenly split, no inferences could be made about mother's job status and substance use.

In summary, it appears that certain trends exist in families where adolescents are using/abusing alcohol/drugs verses the families of nondrug using adolescents. In general, the parents of abusing adolescents appear to show a higher divorce rate, as well as lower levels of education and full time job employment when compared to the parents of nondrug using adolescents. These trends appear to support the theoretical and clinical observations of Gorsch

Table 4

Crosstabulation Of Group Membership With Parents' Educational Status

Educational Level	Nonusers	Users	Abusers	Totals
Fathers				
High School	34(31.8)	26(32.5)	16(32.0)	76(32.1)
College	18(16.8)	14(17.5)	2(4.0)	34(14.3)
Graduate School	28(26.2)	14(17.5)	5(10.0)	47(19.8)
Other	27(25.2)	26(32.5)	27(54.0)	80(33.8)
Totals:	107(100.0)	80(100.0)	50(100.0)	237(100.0)
Mothers				
High School	49(45.8)	30(37.5)	16(32.0)	95(40.1)
College	24(22.4)	12(15.0)	5(10.0)	41(17.3)
Graduate School	8(7.5)	8(10.0)	2(4.0)	18(7.6)
Other	26(24.3)	30(37.5)	27(54.0)	83(35.0)
Totals:	107(100.0)	80(100.0)	50(100.0)	237(100.0)

Table 5

Crosstabulation Of Group Membership With Parents' Job Status

Educational Level	Nonusers	Users	Abusers	Totals
Fathers				
Employed Full Time	95(88.8	61(76.3)	37(74.0)	193(81.4)
Employed Part Time	3(2.8)	5(6.3)	5(10.0)	13(5.5)
Unemployed	7(6.5)	10(12.5)	6(12.0)	23(9.7)
Do Not Know	2(1.9)	4(5.0)	2(4.0)	8(9.7)
Totals:	107(100.0)	80(100.0)	50(100.0)	237(100.0)
Mothers				
Employed Full Time	57(53.3)	48(60.0)	30(60.0)	135(57.0)
Employed Part Time	22(20.5)	6(7.5)	9(18.0)	37(15.6)
Unemployed	26(24.3)	24(30.0)	11(22.0)	61(25.7)
Do Not Know	2(1.9)	2(2.5)	0(00.0)	4(1.7)
Totals:	107(100.0)	80(100.0)	50(100.0)	237(100.0)

and Butler (1976) who note that family relationships appear to play a critical role in determining subsequent adolescent drug use.

Students' Educational Aspirations

The three groups differed significantly on their perceived commitment to education. The nonusers group reported much higher levels of educational aspirations than both of the other two groups. As can be seen on Table 6, 47.7% of the nonusers aspired toward a college degree compared to 7.5% of the users groups and only 4.1% of the abusers group. Similarly, 44.9% of the nonusers group reported that they planned to complete graduate school compared to 12.5% of the users group and only 4.1% of the abusers group.

These findings supported the literature on students who are not committed to educational pursuits are more likely to engage in alcohol/drug use (Hirshi, 1969, Elliot & Voss, 1974; Friedman, 1983; Galli & Stone, 1975; Robins, 1980; Brooks et al., 1977).

Perceptions of the Family

Family Cohesion

Research Questions 1, 2 and 3. A primary aim of this study was to explore the variable of perceived family

Table 6

Crosstabulation Of Group Membership With Student's Educational Goals

Educational Goals	Nonusers	Users	Abusers	Totals
College	51(47.7)	6(7.5)	2(4.1)	59(25.0)
Graduate School	48(44.9)	10(12.5)	2(4.1)	60(25.4)
Other	8(7.4)	64(80.0)	46(91.8)	118(49.6)
Totals:	107(100.0)	80(100.0)	50(100.0)	237(100.0)

cohesion as measured by individual members' responses to a reduced version of the FACES III. The first research question asked: Do drug using, drug abusing, and nondrug using adolescents differ in their perception of their family cohesion? The additional research questions were: (Question 2) Among the three groups, do adolescent males and females differ in their perception of their family cohesion? (Question 3) Is there an interaction between group membership (drug using, drug abusing, and nondrug using adolescents) and gender on the reported levels of family cohesion?

Perceived cohesion was measured by a reduced version of the FACES III. Responses to the 5 cohesion items were recoded such that extreme values of 1 or 5 were recoded as a 1 or 3 to represent an extreme response (1 = disengaged, 3 = enmeshed). The remaining scores within the balanced range on the cohesion continuum (separated/connected) were assigned a value of 2. The means for the groups were 2 44, 2.15, 1.94 for nonusers, users, and abusers respectively (Table 7). The means appear to suggest that the nonusers group perceive their family environments as extremely close and more enmeshed as a unit when compared to the users and abusers groups. The abusers group perceive their family environment as more

Table 7

Means and Standard Deviations on the Cohesion Continuum by Gender and Group Membership

		Nonusers	Users	Abusers	Totals
Male	n	44	28	22	94
	x	2.50	2.18	1.91	2.26
	SD	.35	.37	.31	.42
Female	n	63	52	28	143
	x	2.40	2.14	1.96	2.22
	SD	.31	.42	.32	.39
Total	n	107	80	50	237
	x	2.44	2.15	1.94	2.24
	SD	.33	.40	.31	.40

distant and disengaged and thus lacking cohesiveness as compared to the nonusers and users.

A factorial ANOVA was used to test the significance of the differences between the means The ANOVA on cohesion by use and gender showed a significance of main effect for use but not for gender or the interaction (Table 8).

A Tukey test of the differences between pairs of means revealed that all differences exceeded the critical value at alpha equal to .Ø5.

These results were consistent with the theoretical literature which suggests that substance abusing families lack cohesion and attachment (Vaillant & Milontskey, 1982). The fact that the sample of drug abusing adolescents identified a disturbance in cohesion corresponds with family therapy theory which proposes that substance using families have difficulty with emotional bonding and individual autonomy (Minuchin, 1974; Stanton, 198Ø).

The nonusers group perception of their families as more enmeshed than users and abusers is somewhat surprising and contrary to current family therapy theory. Enmeshment is believed to preclude dependence (Minuchin, 1974). Both extremes are proposed to effect the family's ability to function effectively as a unit as well as to provide adequately for the emotional needs of the members.

Table 8

Analysis of Variance Summary for Trichotomous Cohesion Scores by Use and Gender

Source of Variation	Degrees of Freedom	Mean Square	F
Use	2	4.721	38.006*
Sex	1	.106	.850
2-Way Interaction			
Use by Sex	2	.091	.732
Error	231	.124	
Total	236	.163	

*p < .05

Note: N = 237

Family Adaptability

Research Questions 4, 5 and 6. The fourth research question asked: Do drug abusing adolescents, drug using adolescents, and nondrug using adolescents differ in their perception of their family adaptability? The additional research questions were: (Question 5) Among the three groups, do adolescent males and females differ in their perception of their family adaptability? (Question 6) Is there an interaction between group membership (drug using, drug abusing, and nondrug using adolescents) and gender on the reported levels of family adaptability?

Adaptability was measured by individual adolescents' responses to a reduced form of the FACES III. Responses to the 5 adaptability items were recoded to form a trichotomous classification as on the cohesion scale, with a value of 1 or 3 assigned to members who scored in the extremes of rigid and chaotic, and a value of 2 assigned to scores in the balanced range (structured/flexible). The means for the groups were 2.Ø1, 2.Ø1, 1.95 for the nonusers, users, and abusers respectively (Table 9).

A factorial ANOVA was used to test the significance of the differences between the means. The ANOVA on adaptability by use and gender showed nonsignificance for

Table 9

Means and Standard Deviations on the Adaptability Continuum by Gender and Group Membership

		Nonusers	Users	Abusers	Totals
Male	n	44	28	22	94
	x	2.02	1.96	1.97	1.99
	SD	.21	.25	.28	.24
Female	n	63	52	28	143
	x	2.00	2.04	1.94	2.00
	SD	.33	.29	.20	.30
Total	n	107	80	50	237
	x	2.01	2.01	1.95	2.00
	SD	.29	.28	.24	.28

the main effects of use and gender as well as the interaction (Table 10).

The slight variation in scores among the three groups was surprising. The results implied that since the scores were nearly the same, all three groups probably had similar experiences. Further these results are not consistent with the existing theory and literature, which suggest that substance using families have difficulty adapting to situational and developmental stress (Olson et al., 1979; Stanton, 1980).

A possible reason for the unexpected results is that the substance using adolescents attempted to present their families in a favorable manner and/or have greatly distorted belief systems about their families. It is also possible that although the FACES III is administered to family members, it is an individual self report instrument. Therefore, these scores only represent the adolescents perceptions, not all family members. Olson (1985) identified the lack of agreement among family members as a conceptual and methodological issue facing researchers.

Student Activities and Attitudes

Research Questions 7, 8 and 9. The next research questions were concerned with reported levels of extracurricular activity, peer influences, and personal

Table 10

Analysis of Variance Summary for Trichotomous Adaptability Scores by Use and Gender

Source of Variation	Degrees of Freedom	Mean Square	F
Use	2	.064	.846
Sex	1	.007	.090
2-Way Interaction			
Use by Sex	2	.075	.989
Error	231	.076	
Total	236	.076	

*p < .05

Note: N = 237

attitudes among the three groups The question was stated as follows: (Question 7) Is there a difference in the reported levels of extracurricular activities among drug using, drug abusing, and nondrug using adolescents? (Question 8) Is there a difference in the reported levels of peer/community influences among drug using, drug abusing, and nondrug using adolescents? (Question 9) Is there a difference in the reported levels of personal attitudes among drug using, drug abusing, and nondrug using adolescents?

Crosstabulations of the responses were undertaken and the Chi Square test of Independence, and Pearson's R correlation Coefficients were used to test the significance of the relationship between student extracurricular activities, peer influences, and personal attitudes and group membership.

The findings suggested several similarities as well as differences among the groups. Among the users and abusers groups, 91% and 94% respectively reported using alcohol and/or drugs during the weekends. When asked their reasons for using the two groups differed. Of the users, 28% stated they used drugs to relieve pressure and stress at home. However, 54% of the abusing group reported use due to pressure/stress at home. [As seen in Table 11, the test was significant at the .Ø1 alpha level (X^2 = 7.21).]

The findings appear consistent with theoretical and clinical literature which suggests a trend between the family system and the use of alcohol and drugs among adolescents. Clinical observations and reports suggest that such families lack communication and role modeling which represent risk factors to be included in the theories of the etiology of adolescent drug/alcohol use (Anerswald, 1980; Reilly, 1976).

Asked whether their friends used substances, 56% of the users reported friends use compared to 88% of the abusers (Table 12). The test was significant at the .01 alpha level (X^2 = 12.27, 13.70). This appears consistent with current research findings which suggest that drug behavior and drug related attitudes of peers are among the most potent indicator of drug involvement (Kandel, 1978).

With regard to obtaining alcohol/drugs the abusers group consistently reported obtaining all types of substances, spending more money, and frequency of buying substances at a significantly higher rate when compared to the users group. In general, abusers tend to suggest a profile of obtaining alcohol/drugs more from older peers, reporting relatively easy access to all types of substances and obtaining substances on a weekly to monthly basis. The users group tend to get their drugs/alcohol from home, report difficulty in obtaining the hard liquors

Table 11

Crosstabulation Of Group Membership With Reasons For Use

Pressure/Stress At Home	Users	Abusers	Totals
Yes	21(28.4)	27(54.0)	48(38.7)
No	53(71.6)	23(46.0)	76(61.3)
Totals:	74(100.0)	50 (100.0)	124(100.0)

Chi Square = 7.21, df = 1 $p < .01$.

Table 12

Crosstabulation Of Group Membership With Friends' Use of Alcohol/Drugs

Friends' Use	Users	Abusers	Totals
Yes	42(56.8)	44(88.0)	86(69.4)
No	32(43.2)	6(12.0)	38(30.6)
Totals:	74(100.0)	50 (100.0)	124(100.0)

Chi Square = 7.21, df = 1 $p < .01$.

as well as drugs and purchase substances only on a yearly basis, if ever (Tables 13, 14).

There appears to be no existing literature which would support and/or refute these current findings among adolescents reporting the use/abuse of alcohol/drugs.

The three groups reported dissimilar results on questions relating to family and friend involvement and activities. As seen on Table 15, the nonusers group reported much more family involvement than did the users and abusers groups. Of the nonusers 68.2% reported spending free time with their families compared to 35 0% and 18.0% of the users and abusers respectively. Conversely, the users and abusers groups reported almost twice as much involvement with friends compared to the nonusers when utilizing free time.

The findings tend to suggest that nondrug using adolescents spend more time with their family than do the drug using/abusing groups. These findings appear consistent with previous research findings (Maddox, 1970; Tec 1974; Kaufman & Kaufman, 1979; Stanton, 1980). Conversely, the drug using/abusing adolescents tend to report less family involvement and more involvement with peers. These results appear consistent with previous research that states that peer influences are particularly

Table 13

Crosstabulation Of Group Membership With Obtaining Alcohol/Drugs

Substance	Users	Abusers	Totals
Wine			
Yes	42(56.8)	37(74.0)	79(63.7)
No	32(43.2)	13(26.0)	45(36.3)
Totals:	74(100.0)	50(100.0)	124(100.0)
Hard Liquor			
Yes	13(17.6)	24(48.0)	37(29.8)
No	61(82.4)	26(52.0)	87(70.2)
Totals:	74(100.0)	50(100.0)	124(100.0)
Marijuana			
Yes	5(6.8)	16(32.0)	21(16.9)
No	69(93.2)	34(68.0)	103(83.1)
Totals:	74(100.0)	50 (100.0)	124(100.0)
Other Drugs			
Yes	5(6.8)	11(22.0)	16(12.9)
No	69(93.2)	39(78.0)	108(87.1)
Totals:	74(100.0)	50(100.0)	124(100.0)

Table 14

Crosstabulation Of Group Membership With Frequency of Buying Alcohol/Drugs

Frequency	Users	Abusers	Totals
Daily	1(1.4)	1(2.0)	2(1.6)
Weekly	2(2.7)	15(30.0)	17(13.8)
Monthly	4(5.5)	11(22.0)	15(12.2)
Yearly	9(12.3)	5(10.0)	14(11.4)
Never	57(78.1)	18(36.0)	75(61.0)
Totals	73(100.0)	50(100.0)	123(100.0)

Table 15

Crosstabulation Of Group Membership With Spending Time

Group	Nonusers	Users	Abusers	Totals
Family	73(68.2)	28(35.0)	9(18.0)	110(46.4)
Friend	25(23.4)	44(55.0)	32(64.0)	101(42.6)
Other	9(8.4)	8(10.0)	9(18.0)	26(11.0)
Totals:	107(100.0)	80(100.0)	50(100.0)	237(100.0)

important for initiation into the use of alcohol/drugs (Kandel et al., 1978; Jessor et al., 1980).

The groups further differed on involvement with team, club, and group activities. As may be expected, the nonusing group reported significantly higher involvement with extracurricular activities compared to the using/abusing groups (Table 16).

These findings supported existing research which suggests that adolescents not reporting use of alcohol/drugs tend to become more involved in a variety of activities while their drug using counterparts tend to utilize their free time in nonstructured drug/alcohol related activities (Kandel 1978; Jessor et al., 1980).

The overall results supported the current literature which suggests a list of frequently asserted clinical and theoretical speculations regarding the family system as a very salient factor in the etiology of alcohol and drug use in adolescents (Stacey & Davis, 1970; Maddox, 1970; Minuchin, 1974; Kaufman & Kaufman, 1979; Stanton, 1980). The results further supported the theoretical literature which suggest that families with a substance abusing individual have characteristically disengaged boundaries (Davis et al., 1978; Olson et al., 1985). The fact that the drug abusing adolescents identified this disturbance corresponds with family therapy theory which

Table 9

Table 16

Crosstabulation Of Group Membership With Extracurricular Activities

Activities	Nonusers	Users	Abusers	Totals
None	17(15.9)	45(56.3)	41(82.0)	103(43.5)
One	25(23.4)	28(35.0)	8(16.0)	61(25.7)
Two	52(48.6)	5(6.3)	1(2.0)	58(24.5)
Three or More	13(12.1)	2(2.4)	0(00.0)	15(6.3)
Totals:	107(100.0)	80(100.0)	50(100.0)	237(100.0)

proposes that dysfunctional families have difficulty with emotional bonding and individual autonomy (Minuchin, 1974). However, the results did not support the existing theory and the literature which suggest that dysfunctional families have difficulty with adaptivity in regard to developmental stress (Olson et al., 1985). Further, the results are contrary to the expected rigid stability proposed to characterize dysfunctional families (Minuchin, 1974). This will be discussed further in Chapter V.

CHAPTER V

Summary

Procedure

Two hundred and thirty-seven adolescents attending middle schools in southwest Virginia responded to a written questionnaire designed to identify factors associated with teenage alcohol/drug use. Each participant completed a reduced form of the Family Adaptability and Cohesion Scales (FACES III), the Alcohol and Drug Use Index, a Demographic Questionnaire, and the Student Attitude and Behavior Questionnaire. The Alcohol and Drug Use Index provided a means of classifying each participant into a nonusing (107 subjects), using (80 subjects), or abusing (50 subjects) group. The variables of perceived family cohesion and perceived family adaptability were measured by individual responses to the FACES III. The Student Attitude and Behavior Questionnaire was administered for the purposes of obtaining information on student extracurricular activities, peer influences, and personal attitudes and to provide a means of comparison between the three groups. Information was obtained on age, grade level, gender, ethnicity, parental characteristics, and the students' educational aspirations to further identify factors associated with teenage alcohol/drug use.

Significant Findings

Information on the Demographic Questionnaire provided a means of comparison between the three groups. Crosstabulations of group membership showed several trends delineating the users/abusers groups from the nonuser group. The majority of abusers were eighth grade students, whereas nonusers were nearly evenly split between grade levels. Accordingly, the mean age of the abusers group was somewhat higher than the other two groups. Further, substance use was greater among males than females, even though the sample was 60% female.

The three groups differed in regard to parental characteristics. Parents of the users/abusers groups had higher divorce rates as well as lower levels of education and less full time job status when compared to the parents of nondrug using adolescents.

The three groups differed significantly on their perceived commitment to education. As might have been expected, the nonusers group reported much higher levels of educational aspirations than both the users and abusers groups.

The first research question asked: Do drug using adolescents, drug abusing adolescents, and nondrug using adolescents differ in their perception fo their family cohesion? The additional research questions were (Question 2) Among the three groups (drug using, drug abusing,

nondrug using), do adolescent males and females differ in their perception of their family cohesion? (Question 3) Is there an interaction between group membership (drug using, drug abusing, and nondrug using) and gender on the reported levels of family cohesion? These research questions were addressed by an ANOVA measure to test the significance of the differences between the means of the three groups on perceived family cohesion scores. The ANOVA measure was significant at the .05 level on cohesion by use ($F = 38.006$), but not for gender ($F = .850$) or the interaction ($F = .091$). The significant main effect for use supported the theoretical literature which suggests that substance using families lack cohesion and attachment (Vaillant & Miloutskey; Kaufman & Kaufman, 1979; Stanton, 1980).

Research questions 4, 5, and 6 asked: Do drug using drug abusing, and nondrug using adolescents differ in their perception of their family adaptability? Among the three groups, do adolescent males and females differ in their perception of their adaptability? Is there an interaction between group membership (drug using, drug abusing, nondrug using) and gender on the reported levels of family adaptability? These research questions were addressed by an ANOVA measure and similarly explored differences between group membership and respondents on adaptability scores. The ANOVA measure was nonsignificant at the .05 level on adaptability by use ($F = .846$) and gender ($F = .090$) and

the interaction (F = .989). The results were contrary to previous theoretical literature which suggests that substance using families have difficulty adapting to situational and developmental stress (Olson et al., 1979; stanton, 1980).

Research questions 7, 8, and 9 asked whether reported levels of extracurricular activities, peer influence, and personal attitudes differed among the three groups. Crosstabulations and the Chi Square Test of Independence were used to statistically compare the three groups.

The findings suggest several trends emerging from the three groups. The abusers group consisted of individuals who reported little involvement in extracurricular activities, be it involvement with teams, clubs, or groups. The abusers group also reported spending more time and being more involved with their friends versus there own family system. This group also identified their friends as individuals who use/abuse drugs and alcohol. In general, abusers tend to suggest a profile of individuals who spend a lot of time involved with drug/alcohol related friends and activities.

These findings are consistent with theoretical and empirical literature which suggests that adolescents who are abusing alcohol/drugs tend to associate more with drug using peers (Kaplan et al., 1970; Johnston et al., 1979;

Barnes, 1977); spend less time and communicate little with parents (Brook et al., 1976; Auerswald, 1980; Reilly, 1976); and utilize their freetime in nonstructured drug/alcohol related activities (Kandel, 1978; Jessor et al., 1980).

Conversely, the nondrug using adolescents presented a profile quite contradictory of his/her drug abusing counterpart. These individuals tend to become highly involved in extracurricular activities, spend more time with the family system and, therefore, less time with peers/friends.

The findings are consistent with previous theoretical and empirical literature which suggests that nondrug using adolescents appear more involved with their families (Tec, 1974; Kaufman & Kaufman, 1979; Stanton, 1980), as well as with extracurricular teams, clubs, and groups (Kandel, 1978; Jessor et al, 1980).

Theoretical and Research Implications

As was discussed in Chapter I, family therapy theory has proposed that a variety of structural dysfunctions characterize families with a substance using adolescent (Stanton & Todd, 1979; Kaufman & Kaufman, 1979; Ziegler-Driscoll, 1979). The empirical validation in this area is limited, however. This is particularly true when considering the adolescent drug/alcohol user. This study,

therefore, was an exploratory endeavor to investigate the structural variables of cohesion and adaptability as they were manifested in nonusing, using, and abusing adolescents. Further, additional responses in regard to activities attitudes and influences were garnered in an effort to identify factors associated with teenage alcohol/drug use.

The findings somewhat supported both the existing family therapy theory (Haley, 1976; Stanton & Todd, 1979; Minuchin, 1974), and the previous theoretical and empirical literature on families with substance using adolescents cited in Chapter II. The results indicated that nondrug using adolescents perceived themselves as spending more time and being more involved with their families versus their drug using/abusing counterparts.

Stanton and Todd (1979) and Ziegler-Driscoll (1979) suggest that familial risk in drug using families includes a pattern of overinvolvement by one parent and distant and permissiveness by the other. Similarly, families with drug using adolescents are described by Kaufman and Kaufman (1979) as ones in which fathers are "disengaged" and mothers are "enmeshed". However, the results of this study would suggest that adolescents who report nonuse of drugs/alcohol perceive their families as operating more along the enmeshed end of the cohesion continuum, whereas

drug using/abusing adolescents view their families as more disengaged.

The results from this study suggest that perceived enmeshment by the adolescent is positive in that it is associated with levels of drug use/abuse. A possible explanation may be that for young adolescents a high degree of involvement with their families is appropriate for healthy functioning. These results are contrary to current family therapy literature and warrant further investigation.

The scores of the three groups on the adaptability continuum of FACES III were contrary to both the expectations and the existing theory. The scores suggested that all three groups perceived their family adaptability quite similarly. As discussed in Chapter IV, the scores only represented the adolescents' perceptions, not all family members. Olson (1985) has discussed the issue of lack of agreement among family members and identifies it as a conceptual and methodological problem facing researchers Perhaps comparing an objective measure of family adaptability with a subjective, individual, self report measure as FACES III may shed more light on the issue. This area warrants further exploration.

The other area of the study did yield the expected results in the areas of activities, peer influences, and student attitudes. As discussed in Chapter I, there is

currently a paucity of empirical research exploring normal adolescence and characteristics of drug users/abusers. Although this study did show distinct trends among the three groups, this area still further warrants continued exploration. Additional research is needed to further substantiate these results to better understand what factors are associated with teenage alcohol/drug use and abuse.

Limitations of Study

Several limitations to this study are worthy for consideration. The sample used for this study was a nonrandomized sample taken from a restricted geographical setting. Therefore these results are not generalizable beyond the sample utilized.

As previously mentioned, the FACES III questionnaire was reduced for this particular study. Therefore, it may be questioned as to whether or not the instrument was measuring what it is designed to measure. Obviously, the use of the original FACES III questionnaire may shed more light into this limitation.

Finally, parental consent was required to conduct this research Therefore, the sample was restricted and many potential participants were deleted due to this procedure. The use of a randomized sample within several school districts without parental consent may produce

different results.

In summary, these major restrictions need further investigation to substantiate or refute the current results.

REFERENCES

Ackerman, R. (1983). Children of alcoholics. Holmes Beach: Learning Publications.

Adams, G. & Gullotta, T. (1983). Adolescent life experiences. Monterey, CA: Brooks/cole Publishing Co.

Akers, R.L. (1977). Deviant behavior: A social learning approach. Belmont: Wadsworth Press.

Alterman, A.I., & Tarter, R.E. (1983). The transmission of psychological vulnerability: Implications for alcoholism etiology. The Journal of Nervous and mental Disease, 3, 147-154.

Ames, G.M. (1986). The American experience with alcohol: Contrasting cultural perspectives. Chicago: University of Chicago Press.

Anhalt, H. & Klein, M. (1976). Drug abuse in junior high school populations. American Journal of Drug and Alcohol Abuse, 3, 589-603.

Averswald, E.H. (1980). Drug abuse from the family perspective. Rockville, MD: National Institute on Drug Abuse.

Babst, D.V., Deren, S. Schneider, J., Lipton, D.S., & Dembo, R. (1978). A study of family affinity and substance use. Journal of Drug Education, 8, 29-40.

Barnes, G.M. (1981). Drinking among adolescents: A subcultural phenomenon or a model of adult behaviors. Adolescence, 16, 211-229.

Barnes, G.M. (1984). The development of adolescent drinking behavior: An evaluative review of the impact of the socialization process within the family. Adolescence, 12d, 571-590.

Blane, H.T. (1979). Youth, alcohol, and social policy. New York: Plenum Press.

Blane, H.T., & Chafetz, M.E. (1979). Youth, alcohol, and social policy. New York: Plenum Press.

Blechman, E.A. (1977). How well does number of parents explain unique variance in self-reported drug use? Journal of Consulting and Clinical Psychology, 45(6), 1182-1183.

Black, C. (1982). It will never happen to me! Denver, CO: MAC Printing and Publishing Division.

Blum, R.H. (1972). Horatio Alger's Children. San Francisco: Jossey-Bass.

Booz-Allen & Hamilton, Inc. (1974). An assessment of the needs of and resources for children of alcoholic parents. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

Braucht, G., Brakarsh, D., Follingstrad, D., & Berry, K.L. (1973). Deviant drug use in adolescence: A review of psychological correlates. Psychological Bulletin, 79, 92-106.

Brook, J.S., Lukoff, I.F., & Whiteman, M. (1977). Peer, family, and personality domains as related to adolescents drug behavior. Psychology Report, 41, 1095-1102.

Brook, R., Szandorowska, B., & Whitehead, P.C. (1976). Psychological dysfunctions as precursors to amphetamine abuse among adolescents. Addictive Diseases, 2, 465-478.

Butler, J. (1982). Early adolescent alcohol consumption and self-concept, social class and knowledge of alcohol. Journal of Studies on Alcohol, 43(5), 603-607.

Cockett, R. (1971). Drug abuse and personality in young offenders. London: Butterworths.

Coleman, S.B. (1980). Theories on drug abuse: Selected contemporary perspectives. Washington, D.C.: U.S. Government Printing Office.

Elliott, D.S., Huizinga, D., & Ageton, S.S. (1982). Explaining delinquency and drug use. Bouder, CO: Behavioral Research Institute.

Elliott, D.S. & Joss, H.L. (1974). Delinquency and dropout. Lexington: Heath and Company.

Engs, R. (1982). Drinking patterns and attitudes toward alcoholism of Australian human-service students. Journal of Studies on Alcohol, 43(5), 517-531.

Ensminger, M.E., Brown, H., & Kellam, S.G. (1982). Sex differences in antecedents of substances use among adolescents. Journal of Social Issues, 38, 25-42.

Fishburne, P.M., Abelson, H.I., & Cisin, I. (1979). National survey on drug abuse: Main findings. Rockville, MD: National Institute on Drug Abuse.

Forster, B. (1984). Upper middle class adolescents drug use: Patterns and factors. Advances In Alcohol And Substance Abuse, 4(2), 27-36.

Fraser, M., & Hawkins, J.D. (1984). Social network analysis and drug misuse. Social Service Review, 58, 81-97.

Frease, D.E. (1973). Schools and delinquency: Some intervening processes. Pacific Sociological Review, 16, 426-448.

Galli, N., & Stone, D.B. (1975). Psychology status of student drug users. Journal of Drug Education, 5(4), 327-333.

Gantman, C.A. (1978). Family interaction patterns among families with normal, disturbed, and drug abusing adolescents. Journal of Youth and Adolescence, 7(4), 429-440.

Gersten, J.C., Langner, T.S., Eisenberg, J.S., Simcha-Fogan, D.J., & McCarth, E.D. (1976). Stability ad change in types of behavioral disturbance of children and adolescents. Journal of Abnormal Child Psychology, 4, 111-127.

Goltschalk, L.A., Morrison, G.C., Drury, R.B., & Barnes, A.C. (1970). The Laguna Beach experiment as a community approach to family counseling for drug abuse problems in youth. Comprehensive Psychiatry, 2, 226-234.

Gorsuch, R.L. & Butler, M.C. (1976). Initial drug abuse: A review of predisposing social psychological factors. Psychological Bulletin, 83, 120-137.

Haley, J. (1976). Problem solving therapy. New York: Harper & Row.

Harford, T.C., & Spiegler, D.L. (1983). Developmental trends of adolescent drinking. Journal of Studies on Alcohol, 44, 181-188.

Hartmann, D. (1969). A study of drug taking adolescents. Psychoanalytic Study of the Child, 24, 384-398.

Hendin, H., Pollinger, A., Ulman, R., & Carr, A. (1981). Adolescent marijuana abusers and their families. Rockville MD: National Institute on Drug Abuse.

Hindman, M. (Fall, 1976). Family therapy in alcoholism. Alcohol Health and Research World, 2-9.

Hirschi, T. (1969). Causes of delinquency. Berkley, CA: University of California Press.

Holmberg, M.B. (1985). Longitudinal studies of drug abuse in a fifteen-year-old populations. Alcoholism: Clinical and Experimental Research, 47, 265-276.

Hundleby, J.D. & Mercer, G.W. (1987). Family and friends as social environments and their relationships to young adolescents' use of alcohol, tobacco, and marijuana. Journal of Marriage and the Family, 49, 151-164.

Friedman, A.S. (1983). High school drug abuse clients. Rockville, MD: Division of Clinical Research. National Institute on Drug Abuse.

Jessor, R. (1976). Predicting time of onset of marijuana use: A developmental study of high school youth. Journal of Consultng and Clinical Psychology, 44, 125-134.

Jessor, R., Chase, J.A., & Donovan, J.E. (1980). Psychosocial correlates of marijuana use and problem drinking in a national sample of adolescents. American Journal of Public Health, 70, 604-613.

Jessor, R.R., & Jessor, S.L. (1977). Problem behavior and psychological development. New York: Academic Press.

Jessor, S. & Jessor, R. (1974). Maternal ideology and adolescent problem behavior. Development Psychology, 10(2), 246-254.

Johnston, L.D. (1973). Drugs and American youth. Ann Arbor, MI: Institute for Social Research.

Johnston, L.D., Bochman, J.G., & O'Malley, P.M. (1979). 1979 highlights on drugs and the nation's high school students: Five year national trends. Washington, DC: National Institute on Drug Abuse.

Johnston, L.D., Bochman, J.G., & O'Malley, P.M. (1979). Highlights from student drug use in America 1975-1981. Rockville, MD: National Institute on Drug Abuse.

Johnston, L.D., O'Malley, P.M., & Bochman, J.G. (1985). Use of licit and illicit drugs by America's high school students, 1975-84. Rockville, MD: National Institute on Drug Abuse.

Johnston, L.D., O'Malley, P.M., & Eveland, I. (1978). Drugs and delinquency: A search for causal connections. Washington, DC: Hemisphere Publishing Co.

Kandel, D. (1978). Final report: Family processes in adolescent drug use. Rockville, MD: National Institute on Drug Abuse.

Kandel, D.B. (1982). Epidemiological and psychosocial perspectives on adolescent drug use. Journal of American Academic Clinical Psychiatry, 21(4), 328-347.

Kandel, D.B., Kessler, R.C., & Margolies, R. (1978). Longitudinal research on drug use. New York: John Wiley and Sons.

Kaplan, H.B. (1977). Antecedents of deviant responses: Predicting from a general theory of deviant behavior. Journal of Youth and Adolescence, 6, 89-101.

Kaufman, E., & Kaufman, P.N (1979). Family therapy of drug and alcohol abuse. New York: Gardner Press.

Kellam, S.G., & Brown, H. (1982). Social adaptational and psychological antecedents of adolescent psychopathology ten years later. Baltimore, MD: John Hopkins University.

Kelly, D.H., & Balch, R.W. (1971). Social origins and school failure: A re-examination of Cohen's theory of working-class delinquency. Pacific Sociological Review, 14, 413-430.

Kim, S. (1979). An evaluation of ombudsman primary prevention program on student drug abuse. Charlotte, NC: Charlotte Drug Education Center, Inc.

Kohn, P., & Annis, H. (1977). Drug use and four kinds of novelty-seeking. British Journal of the Addictions, 72, 135-141.

Kumfer, K.L. & DeMarsh, J. (1984). Prevention services to children of substance-abusing parents. Rockville, MD: National Institute on Drug Abuse.

Lassey, M. & Carlson, J. (1979). Drinking among teenagers: rural-urban comparison in peer influence. Journal of Alcohol and Drug Education, 23(3), 8-18.

Lewis, C.E., Robins, L., & Rice, J. (1985). Association of alcholism with antisocial personality in urban men. Journal of Nervous and Mental Disease, 173(3), 166-174.

Mackay, J.R. (1961). Clinical observations on adolescent problem drinkers. Quarterly Journal of the Study of Alcohol, 22, 123-134.

Madanes, C. (1981). Strategic family therapy. San Francisco, CA: Jossey-Bass.

Maddox, G.L. (1970). The domesticated drug: Drinking among collegians. New Haven: College and University Press.

McDermott, D. (1984). The relationship of parental drug use and parents' attitude concerning adolescent drug use to adolescent drug use. Adolescence, 19(73), 89-97.

Mercer, G., Hundleby, J., & Carpenter, R. (1978). Adolescent drug use and attitudes toward the family. Canadian Journal of Behavioral Science, 10, 79-90.

Mellinger, G.D., Somers, R.H., & Manheimer, D.I. (1975). Predicting adolescent drug abuse: A review of issues, methods, and correlates. Rockville, MD: National Institute on Drug Abuse.

Miller, J. (1983). National survey on drug abuse: Main findings. Rockville, MD: National Institute on Drug Abuse.

Miller, J.D., & Crisin, I.H. (1980). Highlights from the national survey on drug abuse: 1979. Washington, DC: National Institute on Drug Abuse.

Minuchin, S. (1974). Families and family therapy. Cambridge, MA: Harvard University Press.

Miranne, A. (1979). Marijuana use and achievement orientation of college students. Journal of Health and Social Behavior, 20, 149-199.

Moos, R.H., Bromet, E., Tsu, V., & Moos, B. (1979). Family characteristics and the outcome of treatment for alcoholism. Journal of Studies on Alcohol, 40(1), 78-88.

Nylander, I. (1979). A 20-year perspective follow-up study of 2164 cases at the Child Guidance Clinics in Stockholm. Acta Padeiatricia Scandinavia, 276, 8-45.

Olson, D., McCubbin, H., Barnes, H., Larsen, A., Muxen, M., & Wilson, M. (1985). Family inventories: Inventories used in a national survey of families across the life cycle. St. Paul, MN: University of Minnesota.

Olson, D.H., Porter, J., & Lavee, Y. (1985). FACES III: Family adaptability and cohesion evaluator scales. St. Paul: Family Social Science, University of Minnesota.

Olson, D.H., Sprenkle, D., & Russell, C. (1979). Circumplex model of marital and family systems I: Cohesion and adaptability dimensions, family types, and clinical application. Family Process, 18, 3-28.

Patterson, G.R. (1982). A social learning approach, Vol. 3: Coercive family process. Eugene: Castalia Publishing Co.

Penning, M. & Barnes, G.E. (1982). Adolescent marijuana use: A review. International Journal of Addictions, 17, 749-791.

Pittel, S.M., Calef, V., Gryler, R., Hilles, L., Hofer, R., & Kempner, P. (1971). Development factors in adolescent drug use: A study of psychedelic drug users. Journal of American Academy of Child Psychology, 10, 640-660.

Pittman, D.J., & Gordon, C.W. (1971). Sex role, Family organization, and alcohol abuse. Quarterly Journal of Studies on Alcohol, 32(1), 91-96.

Polk, K., Frease, D., & Richmond, F.L. (1974). Social class, school experience, and delinquency. Criminology, 12, 84-96.

Rees, C.D., & Wilborn, B.L. (1983). Correlates of drug abuse in adolescents: A comparison of families of drug abusers with families of nondrug abusers. Journal of Youth and Adolescence, 12(1), 55-63.

Reilly, D.M. (1976). Family factors in the etiology and treatment of youthful drug abuse. Family Therapy, 2, 149-171.

Robins, L.N. (1978). Sturdy childhood predictors of adult antisocial behavior: Replications from longitudinal studies. Psychological Medicine, 8, 611-622.

Robins, L.N. (1980). Evaluation of treatment of drug abusers. Cambridge: Harvard University Press.

Robinson, E. (1986). College students' perception of their parents, attitudes, and practices toward drug use. Journal of Alcohol and Drug Education, 13(2), 6-12.

Rochel, J.V., Williams, J.R., Brehm, M.L., Cavanaugh, B., Moore, R.P., & Eckerman, W.C. (1975). A national study of adolescent drinking behavior, attitudes, and correlates: Final report. Springfield, VA: National Technical Information Service.

Rosenberg, C.M. (1969). Determinants of psychiatric illness among young people. British Journal of Psychology, 115, 907-915.

Selnow, G.W. (1985). Using a stratified approach in substance intervention and prevention programs among adolescents: An empirical analysis. Journal of Drug Education, 15(4), 327-341.

Selnow, G.W., & Crano, W.D. (1986). Formal verses informal group affiliations: Implications for alcohol and drug use among adolescents. Journal of Studies on Alcohol, 47(1), 48-52.

Senna, J., Rathus, S.A., & Siegel, L. (1974). Delinquent behavior and academic investment among suburban youth. Adolescence, 9, 481-494.

Simon, W. (1974). Psychological needs, academic achievement and marijuana consumption. Journal of Clinical Psychology, 30, 496-498.

Smith, G.M., & Fogg, C.P. (1978). Longitudinal research on drug use: Empirical findings and methodological issues. Washington, DC: Hemisphere-Wiley.

Stacey, B. & Davies, J. (1970). Drinking behaviors in childhood and adolescence: An evaluative review. British Journal of Addiction, 65, 203-212.

Stanton, M.D. (1980). Drugs and the family: A review of the recent literature. Marriage and Family Review, 2, 1-10.

Stanton, M.D., & Todd, T.C. (1979). The family therapy of drug abuse and addiction. New York: The Guilford Press.

Steffenhagen, R.A., McAree, C.P., & Nixon, H.L. (1972). Drug use among college females: Socio-demographic and social psychological correlates. International Journal of the Addictions, 7, 285-303.

Stern, M., Northman, J.E., & Van Slyck, M.R. (1984). Father absence and adolescent "problem behaviors": Alcohol consumption, drug use, and sexual activity. Adolescence, 19(74), 302-312.

Streit, F. (1973). A test and procedure to identify secondary school children who have a high probability of drug abuse. Unpublished doctoral dissertation, Rutgers University.

Streit, F., Halstead, P.L., & Pascale, P.J. (1974). Differences among youthful users and nonusers of drugs based on their perceptions of parental behavior. International Journal of the Addictions, 9(5), 749-755.

Streit, F., & Oliver, H.G. (1972). The child's perception of the family and its relationship to drug use. Drug Forum, 1, 283-289.

Tec, N. (1974). Parent-child drug abuse: Generation continuity or adolescent deviancy. Adolescence, 9(35), 351-364.

Tennant, F.S., Detels, R., & Clark, V. (1975). Some childhood antecedents of drug and alcohol abuse. American Journal of Epidemiology, 102, 377-385.

Vaillant, G.E., & Milofsky, E.S. (1982). The etiology of alcoholism: A perspective viewpoint. American Psychologist, 37(5), 494-503.

Wahler, R., Leske, G., & Rogers, E. (1979). Behavioral systems for the developmentally disabled. New York: Brunner/Mazel.

Wechsler, H. (1976). Alcohol intoxication and drug use among teen-agers. Journal of Studies on Alcohol, 37, 1672-1677.

Wechsler, H., & Thum, D. (1973). Drug use among teenagers: Patterns of present and anticipated use. International Journal of the Addictions, 8, 909-920.

Wegscheider, S. (1981). Another chance: Hope and help for the alcoholic family. Palo Alto, CA: Science and Behavior Books.

Weidman, A. (1983). The compulsive substance abuser: Psychological differentiation and family process. Journal of Drug Education, 13(2), 161-172.

Welpton, D. (1968). Psychodynamics of chronic LSD use. Journal of Nervous and Mental Disease, 147, 377-385.

Ziegler-Driscoll, G. (1979). Family research study at Eagleville hospital and rehabilitation center. Family Process, 16, 175-189.

APPENDIX A:

Release of Information Forms

COLLEGE OF HUMAN RESOURCES

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061-0515

CENTER FOR FAMILY SERVICES

CONSENT FORM

Dear Parents/Students:

I am currently investigating ways to effectively provide students with knowledge on the topic of drugs/alcohol. At present, research on the topic of adolescent substance use or nonuse is being planned in the Montgomery County School System. This research will add to our understanding of young adolescents and what coping devices they use or need to maintain a substance-free lifestyle. Montgomery County students/parents have been chosen for this research because of the wide variety of experiences represented by this school system. Each student's views are important to the research. We are seeking your permission to allow your child(ren) to participate in this research project by answering some questions about alcohol/drug use on a questionnaire. The information provided by each child is completely confidential. Each child may refuse to answer any of the questions or to withdraw from the study at any time. We encourage you to participate in this research that should be both interesting and helpful to the welfare of all students in the Montgomery County School System. For further information, please feel free to contact me at or , or Dr. Paula Dail at .

Sincerely,

Lee Shilts

My child(ren), _____, has (have) my permission to take part in the study described above.

_____
Parent/Guardian

_____ _____ _____
Child Child Child

APPENDIX B:

Instruments

PART A: The following questions relate to your personal use of alcohol and/or drugs. There are no right or wrong answers. Only you will know what you report, so please give honest answers.

1. Which of the following best describes how often you drink beer? (Circle Number)

   1. I've never had a beer.
   2. I've had 1-4 beers in my life.
   3. I have 1-4 beers a year.
   4. I have 1-2 beers a months.
   5. I have 1-2 beers a week.
   6. I have about one beer almost every day.
   7. I have a few beers almost every day.

2. Which of the following best describes how often you drink wine/wine coolers: (Circle Number)

   1. I've never had wine.
   2. I've had 1-4 glasses of wine in my life.
   3. I have 1-4 wine a year.
   4. I have 1-2 glasses of wine a months.
   5. I have 1-2 glasses of wine a week.
   6. I have about one glass of wine almost every day.
   7. I have a few glasses of wine almost every day.

3. Which of the following best describes how often you drink hard liquor? (Circle Number)

   1. I've never had a drink of hard liquor.
   2. I've had 1-4 drinks of hard liquor in my life.
   3. I have 1-4 drinks of hard liquor a year.
   4. I have 1-2 drinks of hard liquor a months.
   5. I have 1-2 drinks of hard liquor a week.
   6. I have about one drink of hard liquor almost every day.
   7. I have a few drinks of hard liquor almost every day.

4. Which of the following best describes how often you smoke marijuana? (Circle Number)

   1. I've never had smoked marijuana.
   2. I've tried marijuana, but don't use it anymore.
   3. I smoke marijuana a few times a months.
   4. I smoke marijuana a few times a week.
   5. I smoke marijuana just about every day.

5. Which of the following best describes how often you use illegal drugs other than marijuana or alcohol? (Circle Number)

   1. I've never used drugs.
   2. I've tried drugs, but don't use them anymore.
   3. I use drugs a few times a year.
   4. I use drugs a few times a month.
   5. I use drugs a few times a week.
   6. I use drugs just about every day.

IF YOU ANSWERED NUMBER 1 TO ALL THE ABOVE QUESTIONS, SKIP PART B AND GO ON TO PART C, (QUESTION #24).

IF YOU ANSWERED NUMBERS 2-6 TO ANY OF THE ABOVE QUESTIONS, PLEASE PROCEED TO PART B, (QUESTION #6).

PART B: These questions are to be answered only if you circled numbers 2-6 to any of the earlier questions. The following questions relate to your personal use of alcohol and/or drugs. There are no right or wrong answers. Only you will know what you report, so please give honest answers.

6. Where do you most often use alcohol and/or drugs?

   1. At home when parents are out.
   2. At home with parents present.
   3. At school activities (dances, games, etc.)
   4. At nonschool activities (concerts, parties, etc.)

7. When you use drugs and/or alcohol, where do you most often use them?

   1. Alone
   2. Privately with a few close friends
   3. Publicly with many people present
   4. With adult family members

8. When do you use alcohol and/or drugs? (Circle all that apply)

   1. Before school
   2. During school
   3. After school
   4. Weekends

9. When you use alcohol and/or drugs, you use them because: (Circle all that apply)

   1. Of pressure from friends.
   2. of pressure/stress at home.
   3. Of pressures at school.
   4. I can get along better with people.

10. Do your close friends use alcohol and/or drugs?

   1. Yes
   2. No

11. Do your friends expect you to use alcohol and/or drugs with them?

   1. Yes
   2. No

12. Where do you usually obtain alcohol and/or drugs from?

   1. Home
   2. I buy it.
   3. My friends buy it for me.
   4. I get older kids to buy it for me.

13. Which of the following are easy for you to obtain? (Circle all that apply)

   1. Beer
   2. Wine/Wine Cooler
   3. Distilled alcohol (Bourbon, Vodka, etc.)
   4. Marijuana
   5. Other drugs (LSD, "Speed", Cocaine, etc.)

14. Which best describes how much money you spend on alcohol and/or drugs each month?

   1. 0-$10.00
   2. $11.00 - $20.00
   3. $21.00 - $40.00
   4. Over $100.00

15. Do you usually buy alcohol and/or drugs:

   1. Daily
   2. Once per week
   3. Once per month
   4. Once per year
   5. Never

16. Does your use cause problems at home?

    1. Yes
    2. No

17. Did you have problems at home before you started using?

    1. Yes
    2. No

18. Do you believe your parent(s) know that you use alcohol and/or drugs?

    1. Yes
    2. No

19. Does your family get angry over your using?

    1. Yes
    2. No

20. Do you argue with your family about using alcohol/drugs?

    1. Yes
    2. No

21. Do you use alcohol and/or drugs because: (Circle all that apply)

    1. you feel good (happy, acceptive, carefree).
    2. you feel bad (angry, sad, depressed).
    3. you feel neither good nor bad.
    4. to relieve tension.
    5. other (Please Specify) _____

22. Do you feel you have a current problem with your use of alcohol and/or drugs?

    1. Yes
    2. No

23. How important is using alcohol and/or drugs for you to have fun?

    1. Very important
    2. Somewhat important
    3. Not very important
    4. Not important at all

SKIP TO PART D (Question #29)

PART C: These questions are to be answered only if you circled number 1 to all of the questions in Part A. The following questions relate to your personal nonuse of alcohol and/or drugs. There are no right or wrong answers.

24. Who has been the greatest influence on your choice not to use drugs and/or alcohol? (Circle Number)

    1. Myself
    2. Family
    3. Friends
    4. Church

25. Which best describes your reason for not using drugs and/or alcohol? (Circle Number)

    1. School (grades)
    2. Health reasons
    3. Sports
    4. Fear (letting down family or friends, getting in trouble, etc.)
    5. Personal reasons (religion, etc.)

26. How often are you tempted to use alcohol and/or drugs?

    1. Never
    2. Almost never
    3. Once in a while
    4. Often
    5. Very often

27. Which best describes your present attitude toward your nonuse of alcohol and/or drugs?

    1. Plan to continue to "just say no"
    2. Tempted to use in the near future
    3. May experiment with drugs/alcohol
    4. Plan to use regularly someday

28. How concerned are you about drugs/alcohol use in your school?

    1. Not at all concerned
    2. A little concerned
    3. Somewhat concerned
    4. Extremely concerned

PART D: The following questions relate to your personal choice of using or not using alcohol and/or drugs. Please circle the number to the answer which BEST describes your personal choice of using or not using of alcohol and/or drugs.

29. Whom can you most easily talk to about alcohol and/or drugs?

    1. Family
    2. Friends
    3. Don't talk to anyone
    4. Other (Please Specify) _____

30. How would you rate your parents' attitudes toward the use of drugs?

    1. Strongly dislike
    2. Dislike
    3. Neutral
    4. Like
    5. Strongly like

31. How would you rate your parents' attitudes toward the use of alcohol?

    1. Strongly dislike
    2. Dislike
    3. Neutral
    4. Like
    5. Strongly like

32. With whom do you spend the most time over the weekend?

    1. Family
    2. Friends
    3. Hang out with my boyfriend or girlfriend
    4. Just keep to myself

33. How easy would it be for you to obtain alcohol and/or drugs?

    1. Very easy
    2. Easy
    3. Difficult
    4. Very difficult

34. How many of your friends drink alcohol or use drugs?

    1. None
    2. Only a few
    3. Most

35. Whose opinion of you is most important to you?

    1. Myself
    2. Friends
    3. Family
    4. School

36. How do you use free time? (Circle all that apply)

    1. Family activities
    2. School activities
    3. Community activities (Youth Center, Dances, etc.)
    4. Activities with friends
    5. Other (Please Specify) _____

37. How many kinds of sports teams (like baseball, wrestling, basketball, etc.) do you belong to?

    1. None
    2. One
    3. Two
    4. Three
    5. More than three

38. How many clubs do you belong to at school?

    1. None
    2. One
    3. Two
    4. Three
    5. More than three

39. How many other kinds of groups (Scouts, 4-H, Church groups, etc.) do you belong to?

    1. None
    2. One
    3. Two
    4. Three
    5. More than three

40. How do you deal with tension and anxiety?

    1. Stay by myself
    2. Get involved in activities
    3. Talk to a friend
    4. Exercise
    5. Talk to parents

41. Do you believe that alcohol and/or drugs can help some people get along better with other people?

    1. Yes
    2. No

PART E: Please circle the number which best describes your family now. Remember, we would like to know what your family seems like to you. So do not try to figure out how other members see your family.

DESCRIBE YOUR FAMILY NOW:	Almost Never				Almost Always
42. In solving problems, my suggestions are followed:	1	2	3	4	5
43. My parents approve of my friends	1	2	3	4	5
44. I have a say in my discipline.	1	2	3	4	5
45. I like to do things with just my immediate family	1	2	3	4	5
46. Different persons act as leaders in our family	1	2	3	4	5
47. Family members like to spend free time with each other.	1	2	3	4	5
48. Family members feel very close to each other	1	2	3	4	5
49. We shift household responsibilities from person to person	1	2	3	4	5
50. It is hard to identify the leader(s) in our family.	1	2	3	4	5
51. Family togetherness is very important.	1	2	3	4	5

52. How old are you? _____ years

53. What is your present grade? _____ grade

54. What is your gender (sex)? (Circle Number)

    1. Male
    2. Female

55. Which of the following best describes your racial or ethnic background? (Circle Number)

    1. White
    2. Black
    3. Other (Please Specify) _____

56. Who do you live with? (Circle Number)

    1. Live with biological parent(s).
    2. Live with a biological parent and a stepparent.
    3. Live with adoptive parent(s).
    4. Live with other relative(s).
    5. Live with other adult(s).
    6. Live alone.

57. What is the marital status of each of your parents?

MOTHER	FATHER
1. Never Married	1. Never Married
2. Married	2. Married
3. Divorced	3. Divorced
4. Separated	4. Separated
5. Widowed	5. Widowed

58. How old are your brothers <u>living at home</u>?

    _____ _____ _____ _____
    (age) (age) (age) (age)

59. How old are your sisters <u>living at home</u>?

    _____ _____ _____ _____
    (age) (age) (age) (age)

60. Are you currently receiving free school lunch services? (Circle Number)

    1. Yes
    2. No

61. What is the job status of each of your parents?

MOTHER	FATHER
1. Employed full time (more than 35 hours per week) as: _____	1. Employed full time (more than 35 house per week) as: _____
2. Employed part time (less than 35 hours per week) as: _____	2. Employed part time (less than 35 house per week) as: _____
3. Not employed	3. Not employed

62. What is the highest level of education completed by each of your parents? (Circle Number for each.)

MOTHER	FATHER
1. Grade School	1. Grade School
2. Some High School	2. Some High School
3. High School	3. High School
4. Some College	4. Some College
5. College	5. College
6. Graduate School	6. Graduate School
7. Do not know	7. Do not know

63. What is the level of education you <u>plan</u> to complete?

1. Some high school
2. High School
3. Some College
4. College
5. Graduate School
6. Do not know

APPENDIX C:

Permission to Conduct Research

TELEPHONE

MONTGOMERY
COUNTY PUBLIC SCHOOLS
200 JUNKIN STREET, P.O. BOX 29 CHRISTIANSBURG, VIRGINIA 24073

April 13, 1988

Dr. Lawrence Cross
College of Education
University City Office Building
Virginia Tech
Blacksburg, VA 24061

Dear Dr. Cross:

Since I do not have Lee Shilts' address and since we have talked about the survey more with you, I am giving you the information you both requested about doing a survey of middle school students' substance abuse habits related to family patterns.

After discussing the research with middle school principals and other staff members, we approve the project with these understandings:

1) only seventh and eighth graders (a request of principals) will be surveyed, using students from all four middle schools.

2) only students whose parents give consent will be surveyed. The letter to parents will clearly spell out what kinds of questions will be asked in the research instruments.

3) a report of data, by school but without student names, will be furnished to the school division.

4) the survey will be administered by Shilts or his designee in each school.

Please contact school principals to make arrangements to conduct the survey in each school. Please call Dr. Claire Cole, Director of Secondary Education, if you have questions. We look forward to receiving the results of your survey and wish you success with your research.

Sincerely,

Harold W. Dodge, Ed.D.
Superintendent

cc: Claire Cole, Central Office
Robert Miller, AHMS
Donald Kelsey, BMS
Richard Ballengee, CMS
Nelson Simpkins, SHMS

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