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ALCOHOL INVOLVEMENT AND VIOLENCE:
RELATIONSHIPS AMONG ALCOHOLIC
AND NONALCOHOLIC FAMILIES

By

Eve Ellen Reider

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ABSTRACT

ALCOHOL INVOLVEMENT AND VIOLENCE: RELATIONSHIPS AMONG ALCOHOLIC AND NONALCOHOLIC FAMILIES

By

Eve Ellen Reider

This study examined the relationships between alcohol use and violence among family members in a systematically drawn, nonclinical sample of intact families with young male children. Fathers in the families varied in extent to which they had a prior history of severe alcohol related trouble, and both parents varied in the extent to which heavy drinking was currently being carried on. Families with long term alcohol related difficulties were found to have higher rates of antisocial activity, greater family conflict, and higher rates of marital separation in the lifetimes of the parents. Families with long term alcohol involvement also had higher rates of violence among family members. However, families with greater current alcohol consumption were found to have lower rates of aggression between parents and children, and no relationships were found between spousal aggression and parent current drinking.

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CHAPTER 1

INTRODUCTION TO THE PROBLEM AND REVIEW OF THE LITERATURE

1. Introduction

During the past several years there has been a growing interest in the subject of violence in alcoholic families (Morgan, 1982). Little systematic evidence exists to support an empirical link between violence and alcoholism in families, although clinical reports bind the two rather substantially. [There has also been a growing interest in research on family violence during the past twenty years, beginning first with child abuse and then later examining spouse abuse.] More recently, the focus has been to examine the entire family's role in the process. [Some of the family violence literature has shown that a large portion of assaulters are alcohol abusers (Byles, 1978; Gelles, 1974).] However, this information, although suggestive, cannot be used as confirmation for higher rates of violence in alcoholic families because of inconsistencies and methodological problems that constrain drawing causal inferences from the family violence literature (Coleman & Straus, 1983).

[There are many reasons to believe that an increased incidence of violence does occur in alcoholic families.] [Male alcoholics more often exhibit antisocial behavior than do comparable nonalcoholics (Barnes, 1979; Williams, 1976).] The literature also

[suggests that under certain conditions the use of alcohol may lead to aggression (Gottheil, Druley, Skoloda, & Waxman, 1983). Also, the alcoholic marriage has been shown to be conflictual, with rigid levels of communication existing between husband and wife (Ablon, 1976; Orford, 1975).] [The alcoholic family is a multi-problem, dysfunctional family, which seemingly has a great capacity and likelihood for violence.]

Because rates of alcoholism are higher in males than females, special attention has been given in the literature to the male alcoholic and his family. Research illustrating that the sons of male alcoholics are at increased risk for becoming alcoholic (Cotton, 1979) heightens the need for determining etiology, treatment, and prevention of alcoholism. The focus of this literature review and the proposed research that flows from it will be on the male alcoholic and his family. The present research examines the relationship between higher rates of family violence and higher rates of drinking. The literature that follows, on alcoholism and alcohol abuse and family violence, documents the high probability for the occurrence of violence in alcoholic families.

2. Literature Review

2.1 Effects of Alcohol upon Aggression

A substantial amount of research has been conducted during the past ten years to gain a better understanding of the relationship between alcohol use and aggression. Although no clear understanding exists, some consensus is present. Some models evaluated in this body of literature include the physiological disinhibition model and expectancy/learned disinhibition model.

[The physiological disinhibition model states that "alcohol increases aggression by weakening cortisol control, thereby producing a pseudostimulation from lower, relatively primitive centers of the brain" (Taylor, 1983, p. 287). Disinhibition theory suggest that alcohol use will lead to aggressive behavior, however it has been commonly observed that aggression does not always occur following alcohol use. In the expectancy/learned disinhibition model, the belief that one has consumed alcohol serves as a discriminative cue permitting acting-out behaviors. Although one study supports this model, several other studies report discrepant results (Taylor, 1983).

Researchers today believe that aggression is a function of the interaction of the pharmacological state induced by alcohol and contextual cues that impinge upon the intoxicated person. According to Taylor (1983), strong support exists for a model that "assumes that neither the pharmacological effects of alcohol nor

the cues in the drinking situation can independently account for the aggression expressed by intoxicated persons" (p. 288).

Existing evidence suggests that the relationship between alcohol use and aggression is a complex one, including biological and psychological variables, as well as contextual cues (Boyatzis, 1983; Taylor, 1983). Individuals with a history of arguments, aggressive acts, and low socialization, self-control, and responsibility scores are found to be more interpersonally aggressive after heavy drinking (Boyatzis, 1975). Instigative cues, perception of threat, and the ability to judge degree of being threatened are important factors in this relationship (Taylor, 1983). Expectancy is an important variable, however, a "massive" amount of intersubject variability also exists (Pihl, 1983). Researchers indicate that the location and circumstances in which alcohol is consumed play an important role in the occurrence of aggression. Aggressive behavior is found to be more frequent in loosely organized groups with weak leaders than in structured groups with strong leaders (Gottheil et al., 1983). In addition to bars, many view the family as a safe place for the expression of violence.

2.2 The Alcoholic Family

2.2.1 The Male Alcoholic

It has been estimated that one-third of the population in the United States are moderate or heavy drinkers, and that 4 to 6 percent of the U.S. population are severe problem drinkers or alcoholics (Alcoholism & Drug Addiction Research Foundation, 1978;

DHEW, 1978, 1983; Haglund & Schukit, 1977). The rate of male alcoholics in the population is about three times that of female alcoholics. Research indicates that the sons of male alcoholics are at increased risk for becoming alcoholic (Cotton, 1979). The remaining review, and the proposed research, will focus on male alcoholics and their sons, because of their higher risk status for alcoholism.

[An extensive amount of research has been completed during the past twenty-five years in an attempt to derive a comprehensive understanding of the "alcoholic personality." There is consensus in the literature that a complete picture of the alcoholic personality does not exist (Barnes, 1979; Williams, 1976). However, a few characteristics have been consistently identified. Aggression, activity, antisocial behavior, and impulsivity are factors consistently noted in alcoholics, as well as in prealcoholics who later become alcoholic (Williams, 1976). According to Williams (1976), alcoholics are described as rebellious, hostile, and nonconforming. Additionally, they frequently exhibit antisocial behavior. In his extensive review of the literature, Barnes (1979) notes four characteristics which comprise a syndrome that discriminates alcoholics from normal and other clinical groups. [These four characteristics are weak ego, stimulus augments, field dependent, and neurotic. Weak ego strength traits include weak sexual identity, negative self-concept, psychopathy, hostility, immaturity, impulsiveness, low tolerance for frustration, and present orientation. Barnes

(1979) found in his review that alcoholics are stimulus augmenters with weak egos. Stimulus augmenters are perceived as more likely to feel that they are "constantly being bombarded by sensation from both internal and external sources" (p. 618). Since they often have weak egos, alcoholics will likely feel a sense of subjective discomfort as a result of receiving too much sensation from their bodies and their environment, and alcohol can serve the function of reducing this stimulation. Barnes states that alcoholics display numerous signs of a characteristic that he labels neuroticism. These signs include anxiety, depression, hysteria, and hypochondriasis.

2.2.2 The Wife of the Alcoholic

During the past thirty years, three perspectives have been developed to explain the characteristics of spouses of alcoholics (Finney, Moos, Cronkite, & Gamble, 1983; Moos, Finney, & Gamble, 1982). These perspectives are denoted as: (a) the "disturbed personality" theory, (b) the "stress" hypothesis, and (c) the "coping" perspective (Finney et al., 1983; Moos et al., 1982).

The disturbed personality hypothesis postulated that wives of alcoholics had abnormal personalities which led them to seek out and marry alcoholic men, nurture their alcoholism, and decompensate if their husbands became abstinent. Investigators largely failed to substantiate that spouses of current or recovered alcoholics were characterized by neurotic or disturbed personality traits (Ablon, 1976; Jacob, Favorini, Meisel, &

Anderson, 1978; Moos et al., 1982; Paolino, McCrady, Diamond, & Longabaugh, 1976).

The stress hypothesis examined the stress created by being married to an alcoholic partner and suggested that such spouse characteristics as depression, anxiety, complaints of physical symptoms, and poor health were a direct result of this stress (Moos et al., 1982). There is some support in the literature for this stress perspective (Jacob et al., 1978).

More recently, research has focused on the various coping styles used by spouses of alcoholic partners and the consequences of those styles for both the spouse and the alcoholic mate (Finney et al., 1983; James & Goldman, 1971). According to Moos et al. (1982), this perspective argues that many spouses can cope adequately with the stress they experience and can lead essentially normal lives, depending on their personal resources. Moos et al. (1982) have urged the integration of the above three perspectives within a conceptual framework. According to Finney et al. (1983), this conceptual framework would:

- (a) recognize that spouse functioning is affected not only by the severity of the alcoholic partner's drinking problem but also by other characteristics of the partner (such as level of anxiety, depression, occupational functioning); (b) incorporate other sources of environmental stress (for example, life-change events such as the death of a friend) in addition to partner dysfunction, and (c) acknowledge that a spouse's coping style and family social environment both

mediate the effects of stressors and directly influence spouse functioning. (p. 24)

This model can also be applied to families where there are other types of illnesses, thereby reducing the "specialism" that characterizes spouse research in the alcoholism field (Finney et al., 1983; Orford, 1975).

Difficulties in drawing conclusions in this area of research are frequently attributed to methodological problems (Jacob et al., 1978; Moos et al., 1982). Moos et al. (1982) describe four fundamental limitations: (a) samples of spouses have been small, self-selected, and unrepresentative, (b) spouses have not been compared with adequately matched control groups, (c) spouses have generally been classified into groups on the basis of their reports of their partners' drinking habits rather than on independent information obtained from the partner, (d) research on spouses of alcoholics has progressed independently of studies on spouses of other "dysfunctional" or normal marital partners.

At a conceptual level, Jacob et al. (1978) note that in most studies in both the "disturbed wife" and "stressed wife" literatures, one marital partner is viewed as the victim and the other as the villain. Since much of the recent research suggests there is greater utility in examining the alcoholic family from a systems perspective, it is important to understand how both the alcoholic and the spouse play a role in family functioning, rather than labeling individuals as villains and victims. One needs to

view people as systems as well as individuals, because it yields alternative views of their behaviors.

2.2.3 The Alcoholic Marriage

During the past twenty-five years much work has been completed on the alcoholic marriage. The focus of this work during the past fifteen years has placed an increased emphasis on the family as a unit or system. Researchers are now interested in how the alcoholic family operates, its life history, how alcohol affects the functioning of the system, and how the system adapts and functions (Steinglass, 1982). Increased attention is being paid to the interactions between family members, rather than solely examining individual psychopathology. There are still some weaknesses in the research methodology used to study the alcoholic marriage (Orford, 1975). First, much of the research is descriptive rather than experimental. Second, reliability and validity of data are rarely questioned. Third, there has been a failure to describe and define samples or to consider differences between samples. Fourth, much of the earlier work lacked comparison groups. More importantly, Orford (1975) argues that most studies have focused on alcoholism to the exclusion of other factors involved in family disruption. Recently, researchers have become interested in the question of whether alcoholic families are similar to other families in which marital difficulties exist (Orford, 1975) or in families in which there is some type of chronic illness in the family (Finney et al., 1983).

A large portion of the work emphasizes the negative psychosocial implications of living in an alcoholic family (Steinglass, 1981). There is consensus that serious conflicts and role dysfunctions exist in alcoholic families (Ablon, 1976; Moos & Moos, 1984). [Research examining interactions among alcoholic couples indicate that they are "more rigid, show more conflict, engage in more negative and hostile acts, and are less rational in their problem-solving activities than nonalcoholic couples" (Moos & Moos, 1984, p. 112).] In terms of family environment, relapsed alcoholic families demonstrate high conflict and low cohesion, expressiveness, and organization (Moos, Finney, & Chan, 1981). Alcoholic families are perceived as chaotic, embedded in conflict, rigid in their interactions, and competitive in manner (Bullock & Mudd, 1959; Gorad, 1971; Moos et al., 1982). These families are described as inconsistent and disorganized.]

Even though alcoholic families have many difficulties in functioning, alcohol has also been perceived as having adaptive consequences for the alcoholic marriage (Steinglass, 1981). It may also be an integral part of adaptive functioning in the system (Steinglass, Weiner, & Mendelson, 1971). Jacob, Dunn, and Leonard (1983) found high alcohol consumption associated with high satisfaction and reduced symptomatology in the spouses of steady, but not binge drinkers. From these results Jacob et al. (1983) hypothesized that marital/family relationships are more satisfying during high versus low consumption periods. Jacob et al. (1983) noted that binge drinkers presented more pathological adjustments

than steady drinkers, indicated by higher scores on various MMPI scales. The alcoholic's drinking patterns play an important role in family functioning, although this role is not yet fully understood. Researchers continue to examine the factors that determine the complex nature of functioning in these families (Moos & Moos, 1984).

Despite discrepancies in the work on the alcoholic family, there is agreement that family functioning plays an important role in the alcoholic's drinking. [From a family systems perspective, alcohol is perceived as a central organizing aspect and integrated part of family functioning. With this increased understanding in recent years that family functioning is often an integrative aspect of the alcoholic's drinking, family therapy has become more frequently used as a treatment for alcoholism (Janzen, 1977; Steinglass, 1976; Usher, Jay, & Glass, 1982).]

2.3 A Comprehensive View of Alcoholic Families

In examining the work already completed on the male alcoholic and his family, one must consider the existence of violence in these families. The male alcoholic is shown to be an impulsive, hostile, aggressive individual, with low tolerance for frustration. The literature examining the effects of alcohol on aggression supports the everyday observation that under certain conditions some individuals will become aggressive when consuming alcohol. The alcoholic with antisocial character is seen as more likely to become aggressive under drinking conditions, as well as when alcohol is not being consumed. Also, the alcoholic family

has many difficulties in functioning. The alcoholic family lives with much conflict and stress, which includes marital difficulties, unemployment and economic troubles, child behavior problems, and encounters with the law. The alcoholic family has rigid forms of communication, poor problem-solving skills, and seemingly few resources to deal with stress. Violence may be one manner of interacting and resolving problems for the alcoholic family. The family violence research will now be examined, in order to gain a better understanding of violent families and to consider the possible manner in which a link between violence and alcoholism would occur in these families.

2.4 Family Violence Research

2.4.1 Epidemiology

The subject of child abuse became interesting to researchers and the American public during the 1960s, when information was first presented on the "Battered Child Syndrome" (Kempe, Silverman, Steele, Droegemueller, & Silver, 1962). A large volume of research has been completed in the past twenty years on the incidence, etiology, treatment, and prevention of child abuse.

The National Center on Child Abuse and Neglect estimates that each year there are one million cases of child abuse and neglect, at least 200,000 of which involve physical abuse (American Humane Association, 1978). Fewer statistics are available on spouse abuse, since laws concerning spouse abuse have only been in existence for a few years. Nevertheless, what statistics are available on spouse abuse show that it is as great of a concern as

child abuse. According to Straus (1977), it has been estimated that as many as 1.7 million spousal assaults occur each year. The percentage of couples experiencing physical violence at some point during their marriage has ranged from estimates of 30% (Straus, 1978) to 60% (Gelles, 1974; Walker, 1979).

[During the past ten years, increased attention has focused on the concept of family violence, rather than specifically focusing on child abuse or spouse abuse.] Little research documenting the incidence of family violence existed prior to 1976 when Straus, Gelles, and Steinmetz (1980) completed the first national survey of family violence. These researchers estimated that over six million incidents of serious physical abuse may occur in families each year.]

Family violence statistics vary widely across reports, and there are several reasons for these variations (Gelles & Straus, 1979). First, many of the statistics are considered underestimates, since incidents of family violence are less often reported. Second, different definitions of violence and abuse have been utilized in studies, depending on the source of the research (Garbarino, 1977; Gelles, 1980; Gelles & Straus, 1979). The terms are often different in social service agencies than in a court of law, medical emergency room, or in a therapeutic context. Third, these statistics often overrepresent lower middle class and lower class socioeconomic status individuals, who are more likely to seek assistance through social service agencies and domestic violence shelters. Upper middle class individuals often seek

assistance through private means such as physicians and therapists. Fourth, it is important to note that there are few statistics on family violence. Until recently the research has been directed to either child abuse or spouse abuse, not to the family as a whole. One needs to be cautious in examining the statistics on family violence, since many are not representative of the population.

2.4.2 Definitions of Violence and Abuse

One difficulty in the family violence research involves arriving at consensual definitions for the terms "violence" and "abuse" (Gelles & Straus, 1979). Using different definitions makes it difficult to generalize research results. According to Straus et al. (1980), child abuse "typically refers to acts committed by parents on their children which other members of the society view as inappropriate and harmful" (p. 7). This conception of child abuse stems from historically and culturally relative judgements. In their research on family violence, Straus et al. (1980) distinguish between "normal violence" and "abusive violence" and operationalize these terms. Normal violence is defined as:

an act carried out with intention, or perceived intention, of causing physical pain or injury to another person. The 'physical pain' can range from slight pain, as in a slap, to murder. The basis for the 'intent to hurt' may range from a concern with a child's safety (as when a child is spanked for

running into the street) to hostility so intense that the death of the other is desired. (p. 20-21)

Abusive violence is differentiated from "normal violence" by its "high potential" for injuring the person being hit.

There is some controversy over these definitions of violence and abuse. In terms of normal violence, many people do not consider the slaps and spankings of children to be violent behavior. Also, the definition of abusive violence used fails to take into consideration what actually happened to the person. For example, an act where an individual was punched but not hurt and an act where a person was punched and received a fractured jaw are both considered "abusive violence" (Straus et al., 1980). Straus et al. (1980) state, "We counter by saying that the things which differentiate the former from the latter, or which influence whether someone who is punched is injured or not, are typically random phenomena such as aim or luck" (p. 22). As one can see, it is not easy to determine definitions for violence and abuse, or aggression in general, and such definitions have undergone historical change even in their conceptualizations (Eron, 1987).

2.4.3 Methodological Problems in the Research

Many methodological problems exist in the family violence research, since care has often not been given to research design. Sample selection is one methodological problem in family violence research (Gelles, 1980). Much of the research has been based upon unrepresentative samples, with subjects often obtained from police records, courts, social service agencies, or domestic violence

shelters. Individuals obtained in this manner are often of low socioeconomic status, which will confound the data and render results inconclusive if results are generalized beyond this population (Perry, Wells, & Doran, 1983). These various sources of data use different definitions of violence and abuse, which makes it difficult to generalize results. Also, some studies use information derived from victims, while other research is based upon the reports of perpetrators (Perry et al., 1983). It is likely that a very different conception of family violence will be derived, depending upon the source of the information. Another problem in sample selection involves the lack of control groups, which renders results inconclusive (Gelles, 1982; Parke & Collmer, 1975; Perry et al., 1983).

The methods used to obtain information in family violence research create another methodological problem. Information is often obtained from case records, narratives, or unstructured interview formats (Herrenkohl, Herrenkohl, & Egolf, 1983; Hilberman & Munson, 1977-78; Martin & Walters, 1982). This method of obtaining information lacks formal testing or interviewing procedures and makes reliability difficult to ascertain. These are some of the methodological problems in the research that make it difficult to arrive at a comprehensive understanding of family violence.

2.4.4 Research Findings

(During 1976, Straus et al. (1980) completed a national survey of family violence in the United States.) Using a probability

sample of 2,143 individuals, these researchers measured the level and incidence of violence in families using a series of questions called the "Conflict Tactics Scales" (CTS). The Conflict Tactics Scales measure family violence by asking about the ways in which conflict is resolved among family members. The eighteen items can be grouped into three methods of resolving conflicts; (a) the use of rational discussion and argument, (b) the use of verbal and non-verbal expressions of hostility, and (c) the use of physical force or violence. These researchers considered many of the derived statistics to be underestimates, since people are reluctant to admit to the occurrence of violence in their own home.

[Extrapolating from these data, they concluded that over 1.7 million Americans had at some time faced a husband or wife wielding a knife or gun, and well over two million Americans had been beaten up by their spouse. Approximately six million couples had experienced at least one beating incident during the course of their marriage. Regarding sex differences, it was estimated that 1.8 million wives were beaten by their husbands and over two million husbands were beaten by violent wives per year. It was also estimated that between 3.1 and 4 million children were kicked, bitten or punched, and between 1.4 and 2.3 million children had been beaten up by a parent at some point during their lives. Also, between 900,000 and 1.8 million parents had used a knife or gun at some time on their children.]

[Straus et al. (1980) found in their national survey many factors related to family violence. Social factors associated with family violence included being a younger family, having a low income, being a blue collar worker, and the male being unemployed or having a part time job. It was noted that the more conflicts a couple have, the more likely they are to get into a physical fight. In terms of child abuse and spouse abuse, the safest homes are those with fewer than two children, where the husband and wife experience little life stress in the course of a year, and where a democratic system is used to make decisions.]

[These researchers stated that the highest risk of family violence occurs when there is more than one child at home, where a great deal of life stress is experienced by one or both of the spouses, and where decision making is mostly in the hands of one person.]

[Gelles (1980) completed an extensive review of family violence research in the seventies and found four social factors consistently related to abuse and violence. These factors included; the cycle of violence, socioeconomic status, stress, and social isolation. Thus, individuals who experienced violence or abuse as children were more likely to become child or spouse abusers as adults than those who experienced little or no violence as children (this is the cycle of violence).] In addition, although family violence can be found in families across all socioeconomic levels, research in the seventies demonstrated that domestic violence is more prevalent in low socioeconomic status families. Gelles also found that family violence rates are

directly related to social stress in families. Associations were reported between various forms of family violence and specific stressful situations and conditions, such as unemployment or part-time employment of males, financial troubles, pregnancy in the case of wife abuse, and being a single-parent family in regard to child abuse. It was also consistently found that social isolation increases the risk that there will be severe violence directed at children or between spouses.

[Gelles (1980) found specific factors related to child or spouse abuse.] Some of the factors regarding violence towards children include; larger than average family size, low birth-weight child, prematurity of child, and lack of attachment between mother and child. Females are more apt to abuse their children and males are slightly more likely to be the victims of child abuse. [^{also} Wife abuse is reportedly more common when husband and wife report low job satisfaction of the husband, when the husband has no religious affiliation, and when there are alcohol problems.]

3. Statement of the Problem

[A large proportion of the work completed on family violence documents that many assaulters consumed alcohol prior to the violent event and/or were alcohol abusers (Byles, 1978; Coleman, Weinman, & Hsi, 1980; Gayford, 1975; Gelles, 1974; Hilberman, 1980; Langley & Levy, 1977).] Although suggestive, it has been noted that researchers cannot use the high rate of alcohol abuse

found in family violence statistics as confirmation of violence in alcoholic families (Morgan, 1982). Coleman and Straus (1983) noted that if a random sample of parents in the population are examined, high rates of both physical abuse and alcohol abuse will be found in the population. They stated that it is very likely that families receiving treatment for either alcohol or child abuse are only a small, and possibly unrepresentative, part of the total number of child or alcohol abusers. [Smith (1975) found alcohol abuse as common in a general population sample as in a sample of abusing parents.]

[Although the high incidence of alcohol abuse in family violence statistics cannot be utilized to confirm the occurrence of violence in alcoholic families, there are many similarities noted between violent and alcoholic families (Spieker, 1983).] Both types of families are described as "families in trouble" or "multiproblem families," for they have many difficulties in functioning. Their difficulties include unemployment, economic troubles, marital conflict, and child behavior problems. Both literatures indicate a need to examine the family as a system, in order to better understand the maintenance of violence and alcohol abuse in these families. These families have few resources to deal with stress, as they have rigid levels of communication and poor problem solving abilities. The families often experience higher rates of symptomatology than the rest of the population []

Coleman and Straus (1983) found that the relationship of family violence to frequency of drunkenness was curvilinear.

Individuals who were frequently drunk were more abusive than those who were seldom drunk; however those who were "very often" or "almost always" drunk were among the least violent subjects. It was hypothesized that perhaps alcoholics who binge-drink are more likely to be violent than continuous drinkers, with severe drinkers being the least violent. Although frequency of drunkenness cannot be equated with measures of alcoholism, this study is significant in providing normative data regarding the incidence of family violence in the United States and its relationship to frequency of drunkenness. It also illustrates the potential complexity of the relationship.

In summary, it is highly likely that there is an increased risk for violence in alcoholic families for a number of reasons; (1) The male alcoholic is an impulsive, hostile, antisocial individual, who likely becomes even more aggressive when consuming alcohol. (2) The alcoholic family lives with a high level of stress and seemingly few resources to cope with daily stressors. (3) The alcoholic family is an unhappy, dysfunctional family, characterized by marital conflict, child behavior problems, and a poor home environment. This family has rigid forms of communication and poor problem solving skills. Given all these contributing factors, violence may be one way in which the alcoholic family resolves conflict, and it may also serve as a form of communication among family members. When the alcoholic family encounters additional stress in its daily life, it has no resources with which to cope. The family's existing difficulties

are exacerbated and this stressed dysfunctional system may use violence as a coping response.

The present research explores this problem using a systematically drawn, nonclinical sample of intact families with young children. These families vary in the extent to which heavy drinking is currently being carried on by the fathers (and to a much lesser degree by the mothers). The relationship of past history of violence, current family conflict, and level of alcohol involvement (both past and current) to current level of aggression in these families is examined. The research is especially important because it examines these relationships in a population sample rather than a sample of convenience. Thus its potential for generalizability is greatly enhanced.

4. Formal Predictions

Given all of the prior discussion, there is good reason to believe that there will be higher rates of violence in those families with greater amounts of alcohol consumption and alcohol-related problems. The association between alcohol and conflict, and between alcohol and individual violence has already been commonly observed in the literature. The first two predictions address these relationships. But it is no big step to then make the prediction for a relationship between alcohol consumption and family violence. This is the third hypothesis.

- (1) Heavier drinking families will have higher rates of antisocial behavior in their personal histories (Barnes, 1979; Weil, 1984; Williams, 1976).
- (2) Higher current rates of family conflict and dissatisfaction will be found in heavier drinking families (Moos & Billings, 1982; Moos, Finney, & Chan, 1981).
- (3) A positive association will be found between higher rates of family violence and higher rates of drinking.
 - a) First, higher rates of spousal violence will be associated with increased levels of drinking problems in these families. However this relationship between drinking and violence is expected to be stronger for behavior initiated by the husbands.

b) Second, there will be higher rates of parental violence towards children in heavier drinking families.

c) Third, measures of current alcohol consumption will show a stronger positive relationship (r) to individual and familial violence than will lifetime measures of alcohol consumption.

Chapter 11

METHOD

1. Subjects

1.1 Rationale

Research has shown that the sons of male alcoholics are at considerably increased risk to later become alcoholic adults (Cotton, 1979). The Michigan State University Vulnerability Study (Zucker et al., 1984a) is a longitudinal study interested in the factors that may contribute over time to the development of alcoholism and other behavioral disorders in offspring. The particular focus of the MSU Vulnerability Study is on the male alcoholic family, with current special interest given to male offspring, as the highest probability target children for later alcoholism. Families from this study are an excellent group within which the hypotheses can be tested.

1.2 Selection

In order to yield a dispersion of drinking, families for the project are recruited from two sources. Intact male alcoholic families, with sons between the age of 3.0 and 6.0 years, are systematically recruited through all local district courts in a three county, mid-Michigan area. Alcoholic fathers are obtained by utilizing a drunk driving population, who were apprehended for driving under the influence (DUIL) or driving while impaired (DWI), with blood alcohol levels of at least 0.15% (150 mg/100 ml). A

blood alcohol level of 0.15 would indicate that these males have already developed considerable tolerance for alcohol consumption, since it implies that they have drunk a minimum of 9-11 drinks in a one hour time period, yet are still driving around. These potential candidates are then asked to give their permission to have their names released for contact by the Michigan State University Family Study. It is explained to these individuals that the project works independently of the court, and that no feedback is given to the agency, and that potential subjects are always free to refuse further involvement.

The families are visited in their homes by the project coordinator to screen for suitability for the study and to recruit the family. It is explained to families that the project focuses on "Family health and child development" in families with different kinds of health difficulty, and who may vary in health status. Detailed information about study procedures is given and questions are answered, and if the family agrees, the appropriate consent forms are signed. Screening questionnaires and interviews are later administered to ensure that the individual meets formal research diagnostic criteria for alcoholism (Spitzer, Endicott, & Robins, 1975).

Although all of these families have in common the element that they have an alcoholic father, the fact is that they both currently and historically vary considerably in the amount of drinking that goes on. Nonetheless, in order to increase the dispersion on this variable, a community comparison sample is also

recruited for the research. These families are selected from the same census tract as the alcoholic families, assuring homogeneity of social class across levels of drinking. Community families are contacted by using door-to-door survey techniques to find homes with children of similar age (± 0.5 years), sex, and sibling composition as those in the alcoholic families. The project coordinator will then go to the home and recruit the family in the same manner as an alcoholic family. Subjects used in the present analyses consist of twenty-four alcoholic families and six community families. Sociodemographic characteristics of this combined sample are given in Table 1.

2. Data Collection Procedures

Data collection for each family involves an eight session contact schedule, that includes eighteen hours of assessment instruments (some completed by the interviewers after having left the home). The majority of the data collection is in the family's home. The family comes to Michigan State University twice during the data collection procedure, once for a series of structured parent-child interactional tasks, and once for a complete medical screening of their son. The family is compensated (\$125) for completing an extensive battery that includes developmental measures on the target child, questionnaire, interview and self-report data by both parents, and rating data on all study members done by each other and by project staff.

Table 1
Sociodemographic Characteristics of the Study Sample (N=30: 24
alcoholic and 6 community control)

Age in Years

Fathers	\bar{X}	30.67
	S.D.	4.18
Mothers	\bar{X}	29.40
	S.D.	4.53

Religion (%)

	<u>Fathers</u>	<u>Mothers</u>
Protestant	23	34
Catholic	17	17
Jewish	0	3
No Religion	37	21
Other	23	24

Education (Years)

Fathers	\bar{X}	12.40
	S.D.	2.47
Mothers	\bar{X}	13.20
	S.D.	2.30

Number of Children Currently Living at Home

\bar{X}	2.17
S.D.	.87

Age of Target Child (in Months)

\bar{X}	57.9
S.D.	14.1

Table 1 (cont'd)

<u>Birth Position of Target Child (%)</u>	
1st	70
2nd	10
3rd	13
4th	7

3. Measures

Each family participating in the MSU Vulnerability Study completes many questionnaires, direct observation sessions and interviews (Zucker, 1980; Zucker et al., 1984a). The particular instruments that are of relevance for this research examine the incidence of violence in these families, extent of prior antisocial behavior in the adults, measures of family environment and conflict, and measures of long term alcohol involvement as well as current drinking behaviors.

3.1 Measuring Family Violence: The Conflict Tactics Scale-Revised

In their national survey on family violence, Straus, Gelles, and Steinmetz (1980) used the Conflict Tactics Scale (CTS) to determine the incidence of violence in American families. The CTS examines spousal violence, parents' violence towards children, children's violence towards parents, and sibling violence. It measures family violence by asking about the ways in which conflict is resolved by family members. The eighteen items used can be grouped into three methods for resolving conflicts: (a) the use of rational discussion and argument; (b) the use of verbal and non-verbal expressions of hostility; and (c) the use of physical force or violence. Ordinary violence and abuse are distinguished in the CTS. The internal consistency of the CTS was examined by two techniques; item analysis and the Alpha coefficient of reliability (Straus, 1979). Based on an earlier

pilot study of 385 couples, the mean item-total correlation was .87 for the Husband-to-Wife Violence Index and .88 for the Wife-to-Husband Violence Index (Straus, 1979). The alpha coefficients for the national sample were .83 for Husband-to-Wife Violence Index, .82 for Wife-to-Husband Violence Index and .88 for the Couple Violence Index.

Several items have been added to the instrument for use in the MSU Study, as well as regrouping of some already existing items (See Appendix A for a copy of the instrument). Respondents are asked whether an event ever occurred, not just whether it occurred during the past year. Information regarding violence between siblings is omitted since age of the target child is still quite young. Follow-up questions are added regarding alcohol consumption at the time of the violent event. Respondents are also asked whether they were exposed to violence or abuse in their homes as children. This revised CTS is administered as part of the Diagnostic Interview Schedule (Robins, Helzer, Croughan, & Ratcliff, 1981; Robins et al., 1985), a diagnostic interview that is given to each parent separately. The CTS is given about 1-1/2 hours into the DIS, after the respondent has had an opportunity to develop considerable rapport with the interviewer. This enables parents to feel more comfortable in answering questions of a highly personal nature.

3.2 Measuring Family Environment and Family Conflict: The Family Environment Scale (FES)

The Family Environment Scale (FES) (Moos & Moos, 1981) is a questionnaire measure of family functioning that is completed by each parent. The FES has been used extensively in research on alcoholic as well as other types of families (Moos & Billings, 1982). It is a 90 item, true-false inventory that measures family environment on ten dimensions, which include personal growth emphasized by family members and degree of family structure. The FES assesses the husband's and wife's perceptions of three aspects of family climate: (a) areas of personal involvement and activity emphasized by family members (Independence, Achievement Orientation, Intellectual Orientation, Active Recreational Orientation), (b) quality of interpersonal relationships in the family, (Cohesion, Expressiveness, Conflict) and, (c) the degree of structure in the family (Organization, Control). These subscales have adequate internal consistency, ranging from .64 to .79, good eight-week test-retest reliability, ranging from .68 to .86, and average subscale intercorrelations, around .20, indicating that they measure distinct, though somewhat related, aspects of family social environments (Moos & Moos, 1976).

3.3 Measuring Antisocial Involvement: The Antisocial Behavior Checklist

The Antisocial Behavior Checklist is a 46 item inventory of behaviors involving ten different homogenous content subscales, which include parental defiance, adolescent delinquent behavior,

job related antisocial behavior, etc. (Zucker & Noll, 1980a). The questionnaire is administered by way of asking the frequency of one's participation in different adventures and activities. This instrument is a revision of an earlier antisocial behavior inventory utilized in the Rutgers Community Study (Zucker & Fillmore, 1968; Zucker & Barron, 1973), that has been modified so that items are salient for adult antisocial activity. A series of reliability and validity studies with populations ranging from college students to jail inmates has shown that the instrument has adequate test retest reliability (.81 over four weeks), and the coefficient alpha is .84. It differentiates among groups with major antisocial behavior histories (prisoners) vs. individuals with minor offenses in district court vs. university students. Both parents also complete this inventory.

3.4 Measuring Long Term Alcohol Involvement and Current Drinking Behaviors

Several questionnaires are administered individually to husband and wife to determine the nature of their drinking behaviors. Parents are given an extensive Drinking and Drug History (Zucker & Noll, 1980b), the Short Form of the Michigan Alcoholic Screening Test (the SMAST) (Selzer, 1975), and are also queried about drinking practices during the Diagnostic Interview Schedule. From these data it is also possible to determine the quantity, frequency, and variability of drinking behaviors, using Cahalan, Cisin, and Crossley's (1969) Quantity-Frequency-Variability (QFV) Alcohol Consumption Index.

CHAPTER III

RESULTS AND DISCUSSION

1. Analysis

The design calls for a correlational analysis to test the hypotheses. But given that the alcoholic and community comparison families were recruited differently, what evidence is there that merging the two groups will yield a normal distribution on the dependent variable (i.e., the alcohol consumption scores)?

In attacking this problem as well as in dealing with the relationship between different violence measures and alcohol consumption, the position taken here is that the most appropriate measure of drinking behavior is one that attempts to scale drinking problems historically and measures their density of occurrence over the drinking life course of the individual. To do this, a newly developed measure called the drinking density score is used (Zucker, 1987).^{*} This drinking index is a composite variable designed to scale differences in extent of drinking difficulty over the life course. From this perspective, the term alcoholism is conceived of as a dimensional concept, that reflects in differing degrees the extent of drinking, and of problems, that

^{*} This measure has undergone several revisions; a slightly modified version, called the Lifetime Alcohol Problems Scale (LAPS) is being utilized in later reports from the project.

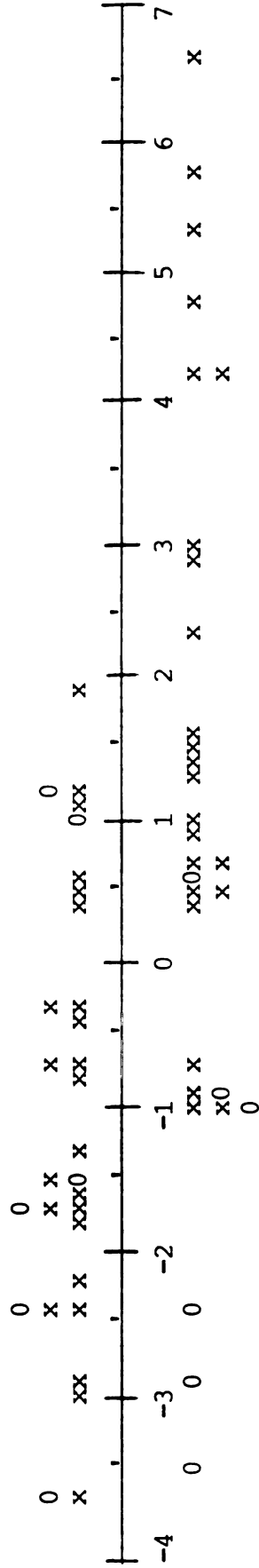
have occurred in varying severity over the drinking life of the person. The drinking density score scales this dimension by way of a theoretically derived multiple index composed of three equally weighted sets of information on drinking. One is an index of earliest drinking difficulty (age when first drunk); the next is an index of current drinking difficulty [Cahalan, Cissin, & Crossley's (1969) Quantity-Frequency-Variability (QFV) index of extent of drinking in the last six months], and the last is an additive measure of number of years between earliest and most recent occurrence of a varied list of drinking problems (i.e., sum of "total drinking problem years" which integrates problems over years). The specific formula for this drinking density measure is as follows:

$$\begin{aligned} & \text{QFV (standardized score)} + \sum (\text{over all drinking problems}) \\ & [\text{drinking related problem} \times \text{years elapsed from first} \\ & \text{occurrence to most recent occurrence}] (\text{standardized score}) + \\ & 1/\text{age first drunk} \times 100 (\text{standardized score}) \end{aligned}$$

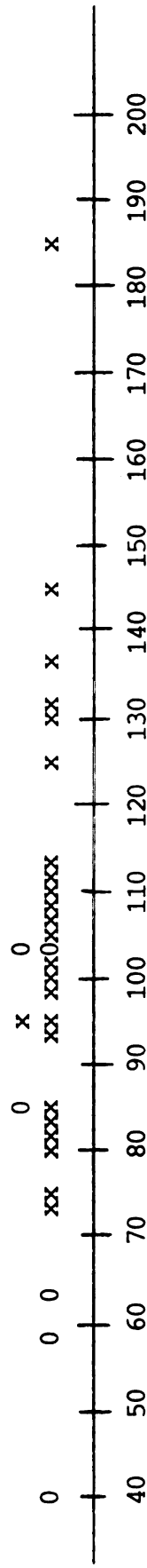
Figure 1 shows the drinking density distribution for both subpopulations. Given the smoothness of the dispersion, it is concluded that the drinking density measure used here reflects a continuous distribution across both subsamples, and that correlational statistics are appropriate for the data analysis.

Mothers' DDS

x = alcoholic family
0 = community comparison family



Fathers' DDS



Family DDS

Family DDS = (mother DDS + 10) x (father DDS + 10)

Figure 1. Drinking density distribution of the study sample

2. Relationship between historical antisocial behavior and drinking density

The first hypothesis is that higher rates of antisocial behavior in prior history will be observed among heavier drinking families. These relationships, of father and mother prior antisocial activity to own drinking density scores are presented in Table 2. Statistically significant positive correlations between fathers' drinking and antisocial activity exist for all antisocial behavior subscale scores. The mean of these relationships is $\bar{.51}$, with a range from .39 to .64. These data strongly demonstrate that father prior antisocial behavior is positively and strongly related to life course alcohol consumption. A significant positive relationship also exists between mother drinking and total antisocial behavior [$r = .40$, $p < .05$], as well as for subscale measures of delinquent behavior [$r = .43$, $p < .05$] and sexual behavior [$r = .42$, $p < .05$]. Although not quite as strong as the relationship between father drinking and prior antisocial behavior, mother prior antisocial activity is also related to alcohol consumption. In summary, for both men and women, as the extent of alcohol use increases, their reports of antisocial activities increase.

3. Relationship between family conflict and drinking density

The second hypothesis is that higher rates of family conflict and dissatisfaction exist in heavier drinking families (Moos &

Table 2

Relationship of Parent Prior Antisocial Activity to own Drinking Density Score- Pearson R's (N=30)

Prior Antisocial Activity	Relationship among fathers	Relationship among mothers
Total	.64 ***	.40 *
Parental Defiance	.52 ***	.28
School Behavior	.56 ***	.05
Delinquent Behavior	.64 ***	.43 *
Excitement, Sensation Seeking	.47 **	.24
Sexual Behavior	.43 *	.42 *
Leaving the Field	.42 *	.13
Trouble with the Law	.55 ***	.27
Serious Physical Aggression	.56 ***	.20
Job Behavior	.39 *	.27
Marital Behavior	.41 *	.24

* $p < .05$, ** $p < .01$, *** $p < .001$

Billings, 1982; Moos, Finney, & Chan, 1981). It was expected that there would be a significant positive relationship between drinking density and family conflict, with higher rates of conflict observed among heavier drinking families. A drinking density score different from individual mother and father drinking scores is utilized in these analyses. It is called a "family drinking density score"; it consists of the product of the father and mother drinking density score in each family. With this measure, one is able to examine conflict in families as family drinking increases, not just the separate drinking of mothers and fathers in families. The family drinking density score will be further discussed and used when examining the relationship between family drinking and family violence (see pp. 64-75).

These results, of a relationship of father and mother perception of family environment (Moos FES) to family drinking density scores are shown in Table 3. The data indicate that a significant positive relationship exists between perceptions of family conflict for both mother and father and family drinking; as predicted, as drinking increases, family conflict increases. In addition a significant negative relationship is demonstrated between family drinking and father report of cohesion in the family. As father drinking increases, family cohesion decreases. These findings, although in accord with expectations, are still much weaker in comparison to the relationships of antisocial behavior and drinking. Consequently, other approaches to testing the hypothesis were explored.

Table 3

Relationship of Parent Perception of Family Environment (Moos FES)
to Family Drinking Density Scores- Pearson R's (N=30)

Family Environment Subscale	Relationship of father perception	Relationship of mother perception
Cohesion	-.37 *	-.11
Expressiveness	-.17	.15
Conflict	.39 *	.40 *
Independence	-.02	-.10
Achievement Orientation	-.09	.07
Intellectual Cultural Orientation	-.22	-.29
Active Recreational Orientation	-.26	-.24
Moral Religious Emphasis	-.22	-.15
Organization	-.04	-.34
Control	.05	-.01

* $p \leq .05$

The number of prior marital separations from all marriages is considered to be an alternative, face valid measure of marital conflict in the life of the individual; so this index was also used to test the hypothesis. The information was obtained from the NIMH Diagnostic Interview Schedule questions relating to this issue (Robins, Helzer, Croughan, & Ratcliff, 1981; Robins et al., 1985). The results of this test are presented in Table 4. The data show a strong relationship between number of marital separations and drinking (for both individual and family drinking density scores). For both fathers and mothers, significant positive correlations exist between long term alcohol consumption and number of marital separations; as alcohol use increases, number of marital separations increases. These data demonstrate a strong positive relationship between history of marital conflict and alcohol consumption at the individual and at the system level. This relationship is not as well reflected in paper and pencil measures, such as the Moos FES, but the indices, taken together provide strong support for the hypothesis.

4. FAMILY VIOLENCE AND ALCOHOL INVOLVEMENT

The third hypothesis was that a positive significant relationship will be found between higher rates of violence and heavier drinking. It is hypothesized that heavier drinking families more often utilize verbal and non-verbal expressions of hostility, as well as the use of physical force or violence in resolving conflict. The relationship between family violence and

Table 4

Relationship of Parent Separations in Marriage (Number) to
Individual and Family Drinking Density Score- Pearson R's (N=30)

	Relationship for husband	Relationship for wife
Individual drinking density	.48 **	.36 *
Family drinking density	.45 **	.61 ***

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

drinking density scores are examined in reports of: (1) spousal aggression (individual report of violence to spouse, as well as spouse violence toward respondent, when resolving conflict during the past year), (2) parent aggression to child (parent individual report of violence to child when resolving conflict during the past year), (3) child aggression toward parent (parent individual report of child violence to respondent when resolving conflict during the past year). Table 5 details the types of violence dealt with in the next section. Aggression scores are reported in terms of the following subscales: Reasoning, Verbal Aggression, Indirect Physical Aggression/ Threats, Physical Violence, Severe Physical Violence, and Total Violence. The items utilized in the subscale scores are detailed in Table 6.

In this section, aggression in different family members is examined, in relation to both father and mother drinking. The following section focuses on the concept of family drinking, rather than the separate drinking of mother and father. This allows for the examination of the relationship between family drinking and family violence.

5. Family Violence and Individual Alcohol Use

5.1 Father Aggression

This section examines father aggression in the family, in relation to his own and his wife's drinking. First, husband aggression to wife is examined by considering husband report of

Table 5

Types of Family Violence Examined via the Revised Conflict Tactics Scale (Violence that Occurred During the Past Year)

I. Spousal Aggression

1. Self-initiated aggression against spouse- self reports
 - 1a) Husband's reports of his aggression to his wife.
 - 1b) Wife's reports of her aggression to her husband.
2. Spouse initiated aggression against self- reported by self
 - 2a) Husband's reports of wife's aggression toward him.
 - 2b) Wife's reports of husband's aggression toward her.

II. Parent Aggression

- 3a) Father reports of violence to child.
- 3b) Mother reports of violence to child.

III. Parent Reports of Child Aggression

- 4a) Father reports of child aggression against father.
 - 4b) Mother reports of child aggression against mother.
-

Table 6

Violence Subscales and Items

Total Violence = Verbal Aggression + Indirect Physical Aggression/Threats + Physical Violence + Severe Physical Violence

Reasoning = a + b + c

- a) Discussed the issue calmly.
 - b) Got information to back up his/her side.
 - c) Brought in or tried to bring in someone to help settle things.
-

Verbal Aggression = d + e + f + g + h

- d) Insulted or swore at you.
 - e) Sulked and/or refused to talk about it.
 - f) Stomped out of the room or house (or yard).
 - g) Cried.
 - h) Did or said something to spite you.
-

Indirect Physical Aggression/Threats = i + j

- i) Threw or smashed or hit or kicked something, but not at you.
 - j) Threatened to hit or throw something at you.
-

Physical Violence = k + l

- k) Hit you or actually threw something at you.
 - l) Pushed, grabbed, shoved, slapped you or spanked you.
-

Severe Physical Violence = m + n + o

- m) Used a belt on you.
- n) Kicked, bit, hit, or beat you up.
- o) Threatened to or used a knife or gun.

aggression to wife, as well as wife report of husband aggression. Second, father report of aggression to child is examined.

5.1.1 Spousal Aggression

5.1.1a Husband aggression to wife and husband drinking

In examining the association to alcohol consumption, reports of both husband and wife perceptions of husband aggression are available. The relationship between husband report of aggression to wife in comparison to wife report of husband aggression are given in Table 7. These results indicate that there is some congruence in these reports.

The hypothesis was that there will be higher rates of husband aggression to wife when resolving conflict in families with husbands who have higher rates of alcohol consumption. Analyses of the relationship between husband aggression to wife and husband drinking, reported separately by husbands and wives, are presented in Table 8. Regarding husband reports, a significant positive relationship is observed between husband drinking and use of indirect physical aggression and physical violence. As husband alcohol use increases, husband reports of both indirect physical aggression and physical violence toward wife increase. Although the relationship is far weaker, wife independent reports of husband aggression tend to corroborate the husband reports. Significant positive correlations exist between husband drinking and wife report of husband's physical violence. As husband drinking increases, wife report of husband's physical violence increases. Essentially, both husband and wife report the greater

Table 7

Relationship of Husband Report of Aggression to Wife in Comparison to Wife Report of Husband Aggression- Pearson R's (N=30)

Aggression to Wife	Relationship
Total Violence	.31 b

Reasoning	.12 b
Verbal Aggression	.27 b
Indirect Physical Aggression/Threats	.31
Physical Violence	.88 ***
Severe Physical Violence	-.05

*** $p < .001$

b N= 29 for indicated correlations

Table 8

Relationship of Husband Drinking Density Score to Aggression to Wife- Pearson R's (N=30)

Aggression to Wife	Relationship of husband drinking to husband report of aggression to wife	Relationship of husband drinking to wife report of husband aggression
Total Violence	.23	-.00 b
Reasoning	-.03	.36 b
Verbal Aggression	.17	-.07 b
Indirect Physical Aggression/Threats	.49 **	.09
Physical Violence	.57 ***	.37 *
Severe Physical Violence	.30	.04

* $p < .05$, ** $p < .01$, *** $p < .001$

b N= 29 for indicated correlations

use of physical violence by husband toward wife with husband's increased alcohol consumption.

5.1.1b Husband aggression to wife and wife drinking

The results of a relationship between husband aggression to wife, reported separately by husbands and wives, and wife's drinking is presented in Table 9. Regarding husband perception, no significant relationship is found between husband aggression to wife and wife's alcohol consumption. Regarding wife perception, a significant positive relationship exists between wife alcohol consumption and wife report of husband's severe physical violence. As wife drinking increases, wife report of husband's severe physical violence increases.

For the most part, it appears that a positive relationship does exist between husband aggression toward wife and alcohol use. The strongest relationship is observed between husband report of aggression to wife and husband's alcohol use. The wife's report of husband aggression corroborates this relationship. Less corroboration is observed for the relationship between husband aggression toward wife and wife's drinking. A relationship is found between wife's alcohol use and wife report of husband's severe physical violence; however, this relationship is not observed in husbands' reports. The data from the present study cannot establish whether wife's heavier drinking intensifies her perception of husband's severe aggression, or whether it reflects occurrences, that because of their unpleasantness, husbands are under heavier pressure to deny.

Table 9

Relationship of Wife Drinking Density Score to Husband Aggression to Wife- Pearson R's (N=30)

Aggression to Wife	Relationship of wife drinking to husband report of aggression to wife	Relationship of wife drinking to wife report of husband aggression
Total Violence	.21	.30 b
Reasoning	.19	.08 b
Verbal Aggression	.22	.29 b
Indirect Physical Aggression/Threats	.02	.21
Physical Violence	.17	.33
Severe Physical Violence	-.07	.44 *

* $p < .05$

b N= 29 for indicated correlations

5.1.2 Father Aggression to Child

It was hypothesized that there would be higher rates of parent violence to child in heavier drinking families. In this section, fathers aggression to child is examined separately in relationship to father and mother drinking. These results are presented in Table 10. No significant relationship is found between father drinking and father aggression to child.

The relationship between father aggression to child and mother drinking is also examined. A significant positive relationship is observed between rates of father physical and total violence toward child and mother drinking. As mother alcohol use increases, rates of father physical and total violence toward child increases.

These results regarding the relationship between father aggression to children and both father and mother drinking are most interesting. It may be that heavier drinking fathers are more peripheral in their relationships with their children. Therefore, their drinking may not have much of an effect upon their use of aggression toward their children. Another possibility is that heavier drinking fathers are more likely to deny child aggression; such denial would serve to attenuate the reported father drinking to father aggression connection. However, it is also possible that increased alcohol use by mothers in families has a different and greater impact on family functioning. From this perspective, heavier drinking mothers would become more peripheral in care-taking of their children and

Table 10

Relationship of Father and Mother Drinking Density Score to Father Aggression to Child- Pearson R's (N=29)

Aggression to Child	Relationship of father drinking to father aggression	Relationship of mother drinking to father aggression
Total Violence	-.05	.37 *
Reasoning	.07	.14
Verbal Aggression	.34	.02
Indirect Physical Aggression/Threats	-.03	.22
Physical Violence	-.16	.40 *
Severe Physical Violence	.04	.33

* $p \leq .05$

fathers would end up being more involved in their children's discipline. Given the potential of these families to be chaotic and conflictual, one would anticipate that mothers' drinking would have a greater impact on the chaos. Under these circumstances, the present data suggest that fathers then use higher rates of aggression in resolving conflict with their children.

5.2 Mother Aggression

This section examines mother aggression in families, in relation to husband and wife drinking. First, wife aggression to husband is examined, by considering wife report of aggression to husband, as well husband report of wife aggression. Second, mother report of aggression to children is examined.

5.2.1 Spousal Aggression

5.2.1a. Wife aggression to husband and husband drinking

As before, both wife and husband report of wife aggression is presented when examining the relationship between alcohol consumption. The relationship between wife report of aggression to husband in comparison to husband report of wife aggression is presented in Table 11. Again, as before, these results indicate that there is congruence in the reports. In fact, there is substantially greater reported congruence here than between husband report and wife report on husband aggression (Table 7). Both of these relationships suggest that there is substantial, independently corroborated, accuracy to the parent report of their aggression.

Table 11

Relationship of Wife Report of Aggression to Husband in Comparison to Husband Report of Wife Aggression- Pearson R's (N=30)

Aggression to Husband	Relationship
Total Violence	.27

Reasoning	.48 **
Verbal Aggression	.25
Indirect Physical Aggression/Threats	.60 ***
Physical Violence	.48 **
Severe Physical Violence	.25

** $p < .01$, *** $p < .001$

b N= 29 for indicated correlations

The hypothesis was that higher rates of spousal aggression, by both husband and wife, exist with increased alcohol use by husband; it was suggested that this relationship would be even stronger for aggression initiated by husbands. As already noted, a strong positive relationship exists between husband drinking and husband aggression to wife. Now the relationship between husband drinking and wife aggression to husband is examined.

The results of the relationship between wife aggression to husband, reported separately by wife and husband, and husband drinking are presented in Table 12. Regarding wife perception, a positive relationship is found between wife report of physical violence toward husband and husband drinking. As husband alcohol use increases, wife report of physical violence toward husband increases.

In examining husband perceptions, no significant relationships are observed between husband report of wife aggression and husband drinking. Although a relationship is found between wife report of aggression to husband and husband alcohol use, this relationship is not corroborated by husband report of wife aggression. Although heavier drinking husbands report themselves as being more aggressive to their wives, they apparently do not perceive their wives as reciprocating or initiating aggression to a greater degree than do more moderate drinking men.

Table 12

Relationship of Husband Drinking Density Score to Wife Aggression to Husband- Pearson R's (N=30)

Aggression to Husband	Relationship of husband drinking to wife report of aggression to husband	Relationship of husband drinking to husband report of wife aggression
Total Violence	.26	.00
Reasoning	.31	-.01
Verbal Aggression	.26	-.02
Indirect Physical Aggression/Threats	-.02	.27
Physical Violence	.47 **	.23
Severe Physical Violence	-.08	.16

** $p < .01$

5.2.1b Wife aggression to husband and wife drinking

The analyses examining the possible relationship between wife aggression to husband, reported separately by wife and husband, and wife's alcohol use are presented in Table 13. Regarding wife perception, a significant positive relationship exists between wife report of aggression to husband and wife drinking. As wife's alcohol involvement increases, her report of total violence and verbal aggression toward husband increases. Regarding husband perception, no relationship exists between wife drinking and husband report of wife aggression

These results indicate that a clear positive relationship exists between wife drinking and wife aggression to husband, according to wife report. As wife alcohol use increases, aggression toward husband increases. The present data indicate that the reports of one's aggression are most clearly connected to one's own reports of one's drinking; thus, wife drinking is most clearly related to wife report of aggression to husband, while husband drinking is most clearly related to husband report of aggression to wife. This suggests that method variance, not surprisingly, enters into the correlation. Ultimately, the only way to most precisely establish the nature of these relationships is to obtain behavioral data (which have their own problems). Such work is far beyond the scope of the present study.

5.2.2 Mother Aggression to Child

It was hypothesized that there would be higher rates of parental violence in heavier drinking families. In this section,

Table 13

Relationship of Wife Drinking Density Score to Wife Aggression to Husband- Pearson R's (N=30)

Aggression to Husband	Relationship of wife drinking to wife report of aggression to husband	Relationship of wife drinking to husband report of wife aggression
Total Violence	.43 *	.30
Reasoning	.30	.32
Verbal Aggression	.42 *	.30
Indirect Physical Aggression/Threats	.30	.25
Physical Violence	.23	-.03
Severe Physical Violence	.30	.04

* $p < .05$

mother aggression to child is examined separately in relationship to father and mother drinking. These results are presented in Table 14. A significant positive relationship exists between mother physical violence to child and father alcohol consumption. As father drinking increases, mother report of physical violence toward child increases. No significant relationship is found between mother drinking and mother aggression toward child.

The results regarding parent aggression to child are most interesting. As noted, father aggression is positively related to mother drinking, while mother aggression is positively related to father drinking. As already suggested, it may be that when one parent is drinking, he or she is more peripheral to handling parenting issues. The other parent may be dealing with a child who has many acting-out behaviors because of the family chaos and conflict. This likely distressed parent, may be more aggressive toward the child in resolving conflict.

5.3 Child Aggression to Parent

Although not explicitly stated in the hypotheses, another set of relationships that can be examined are those between parental drinking and rates of child aggression toward parent. Because of the conflict and chaos that exists in heavier drinking families, one possibility is that children reared in such contexts would engage in higher rates of aggression toward their parents. In addition, it is plausible that parents may not be as apt to report higher rates of aggressive behavior toward their children because of social desirability factors, but they may be more willing to

Table 14

Relationship of Father and Mother Drinking Density Scores to
Mother Aggression to Child- Pearson R's (N=30)

Aggression to Child	Relationship of father drinking to mother aggression	Relationship of mother drinking to mother aggression
Total Violence	.35	.09
Reasoning	.32	.11
Verbal Aggression	.12	.10
Indirect Physical Aggression/Threats	.28	.01
Physical Violence	.47 **	.04
Severe Physical Violence	.07	.29

** $p \leq .01$

report on their children's aggressive behavior, which can be considered an index of aggression in the family. These relationships between children's aggression to parents and parental drinking, will now be examined.

5.3.1 Child Aggression to Father

The results of a relationship between child aggression to father and father and mother drinking, are presented in Table 15. Regarding father drinking, a positive relationship exists between father drinking and child verbal aggression to father. As father history of alcohol use is greater, father report of child verbal aggression is also greater. Regarding mother drinking, no significant relationship exists between mother drinking and child aggression to father.

5.3.2 Child Aggression to Mother

The results of a relationship between child aggression to mother and father and mother drinking, are presented in Table 16. Regarding father drinking, a significant positive relationship exists between father drinking and child total violence and indirect physical aggression to mother. As father drinking increases, mothers report of child indirect physical aggression increase. Regarding mother drinking, no significant relationship is found between mother drinking and mother report of child aggression.

The results indicate that child aggression to parent is only clearly related to father drinking. As father drinking increases, father report of child verbal aggression increases, as well as

Table 15

Relationship of Father and Mother Drinking Density Score to Child Aggression to Father- Pearson R's (N=29)

Aggression to Father	Relationship of father drinking to father report of child aggression	Relationship of mother drinking to father report of child aggression
Total Violence	.34	.14

Reasoning	-.02	.28
Verbal Aggression	.38 *	.20
Indirect Physical Aggression/Threats	-.04	-.27
Physical Violence	-.35	-.29
Severe Physical Violence	-.09	.29

* $p < .05$

Table 16

Relationship of Father and Mother Drinking Density Score to Child Aggression to Mother- Pearson R's (N=30)

Aggression to Mother	Relationship of father drinking to mother report of child aggression	Relationship of mother drinking to mother report of child aggression
Total Violence	.43 * b	.15 b
Reasoning	.25	.03
Verbal Aggression	.31	.17
Indirect Physical Aggression/Threats	.52 ***	.21
Physical Violence	.17 b	.12 b
Severe Physical Violence	.03	.16

* $p \leq .05$, *** $p \leq .001$

b N= 29 for indicated correlations

mother report of child indirect physical aggression. It is possible that these children have learned aggressive behaviors from those observed in their parents' relationships.

6. Relationships between Family Violence and Family Drinking

The previous sections have examined the concept of violence in families in relationship to the separate longterm alcohol consumption of father and mother. Another important concept to examine is the relationship between "family drinking" and violence in families. The idea of family drinking enables one to examine the long term alcohol use of couples, rather than individuals. This permits one to find out how the drinking of the couple-system may affect the amount of aggression that takes place in a family. A drinking score different from individual mother and father drinking density scores is utilized in these analyses. It is called the family drinking density score. As already noted, the family score consists of the product of the father and mother drinking density score in each family (see p. 39-42 for an earlier set of results involving this measure). With this score, one is able to examine whether increased amounts of family drinking will affect the rates of violence that occurs in these families.

6.1 Spousal Aggression

6.1.1 Husband Aggression to Wife

The hypothesis was that there will be higher rates of husband aggression to wife when resolving conflict in heavier drinking families. These results are presented in Table 17. These

Table 17

Relationship of Family Drinking Density Score to Husband
Aggression to Wife- Pearson R's (N=30)

Aggression to Wife	Relationship of family drinking to husband report of aggression to wife	Relationship of family drinking to wife report of husband aggression
Total Violence	.30	.21 b
Reasoning	.08	.37 * b
Verbal Aggression	.25	.12 b
Indirect Physical Aggression/Threats	.40 *	.24
Physical Violence	.61 ***	.56 ***
Severe Physical Violence	.19	.29

* $p \leq .05$, *** $p \leq .001$

b N= 29 for indicated correlations

results show a significant positive relationship between family drinking density and husband report of aggression to wife. As family drinking increases, husband report of indirect physical aggression/threats and physical violence toward wife increases.

Wife reports of husband aggression, independently tend to corroborate husband reports. Significant positive correlations exist between family drinking and reasoning [$r = .37$, $p < .05$] and physical violence [$r = .56$, $p < .001$]. As family drinking increases, wife report of husband using reasoning and physical violence toward her increases. It should be noted that it was originally expected that there would be lower rates of reasoning found in heavier drinking families, and these findings will be elaborated in the discussion section. In essence, both husbands and wives report the greater use of physical violence by husband toward wife in heavier drinking families.

6.1.2 Wife Aggression to Husband

The hypothesis was that there will be higher rates of wife aggression toward husband when resolving conflict in heavier drinking families, although not as high as husband aggression toward wife. These results of a relationship between family drinking and wife aggression toward husband, as reported separately by wife and husband, are presented in Table 18. Regarding wife perception, a strong positive relationship is observed between family drinking and aggression to husband. As family drinking increases, wife report of almost all forms of

Table 18

Relationship of Family Drinking Density Score to Wife Aggression to Husband- Pearson R's (N=30)

Aggression to Husband	Relationship of family drinking to wife report of aggression to husband	Relationship of family drinking to husband report of wife aggression
Total Violence	.51 **	.17
Reasoning	.44 **	.13
Verbal Aggression	.51 ***	.15
Indirect Physical Aggression/Threats	.14	.36 *
Physical Violence	.53 ***	.11
Severe Physical Violence	.09	.16

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

violence (i.e., total, reasoning, verbal aggression, and physical violence) toward husband increases.

Regarding husband perception, only husband report of wife use of threat and indirect physical aggression is positively related to family drinking. As family drinking increases, husband report of wife making threats and throwing objects (but not at him) increases. In heavier drinking families wives strongly see themselves as more aggressive to their husbands; husbands do not particularly see this as occurring. The positive relationship between family drinking and wife report of reasoning toward husband was not expected, and this finding will be discussed later.

In summarizing the relationships between family drinking and spousal aggression, a clear positive association is observed. Regarding husband aggression toward wife, both husband and wife report a greater amount of physical violence with higher family drinking. There does not appear to be as consistent a family connection between drinking and wife aggression to husband. A strong relationship exists between family drinking and wife report of aggression to husband, but there is not as strong a one between drinking and husband perception of wife aggression. These women report themselves as being far more aggressive than their husbands report. It may be that husbands do not see their wives' behaviors as violent in comparison to their own aggressive behaviors.

6.2 Parent Aggression to Child

The hypothesis was that higher rates of parental violence towards children would be found in heavier drinking families. These results are presented in Table 19. No significant relationship exists between family drinking and father aggression toward child. A significant positive relationship exists between family drinking and rates of mother physical violence to child. As family drinking increases, mother reports higher rates of physical violence toward child.

Analyses regarding the relationship between family drinking and combined parent reports of aggression toward their children are presented in Table 20. When parent reports of aggression are combined (summed), a significant positive relationship exists between family drinking and parent verbal aggression and indirect physical aggression/ threats toward child. A more substantial relationship exists for family drinking when parent reports of aggression to child are combined.

6.3 Child Aggression to Parent

It was hypothesized that children will be more aggressive toward their parents in heavier drinking families. The tests of this hypotheses are shown in Table 21. These data indicate a relationship exists between family drinking and father report of child rates of total violence, verbal aggression, and physical violence. As family drinking increases, father report of child rates of total violence and verbal aggression toward him increases. A significant negative correlation exists between

Table 19

Relationship of Family Drinking Density Score to Father and Mother Individual Aggression to Child- Pearson R's (N=29 for Fathers and N=30 for Mothers)

Aggression to Child	Relationship of family drinking to father reported aggression	Relationship of family drinking to mother reported aggression
Total Violence	.16	.34
Reasoning	.13	.31
Verbal Aggression	.28	.15
Indirect Physical Aggression/Threats	.08	.24
Physical Violence	.09	.40 *
Severe Physical Violence	.22	.23

* $p \leq .05$

Table 20

Relationship of Family Drinking Density Score to Combined Parent Aggression to Child- Pearson R's (N=29)

Aggression to Child	Relationship of family drinking to combined parents aggression
Total Violence	.32

Reasoning	.21
Verbal Aggression	.45 **
Indirect Physical Aggression/Threats	.47 **
Physical Violence	.02
Severe Physical Violence	.10

** $p \leq .01$

Table 21

Relationship of Family Drinking Density Score to Child Separate Aggression to Father and Mother- Pearson R's (N=29 for Fathers and N=30 for Mothers)

Aggression to Parent	Relationship of family drinking to father report of child aggression	Relationship of family drinking to mother report of child aggression
Total Violence	.38 *	.47 ** b
Reasoning	.12	.20
Verbal Aggression	.44 *	.36 *
Indirect Physical Aggression/Threats	-.13	.60 ***
Physical Violence	-.38 *	.24 b
Severe Physical Violence	.08	.12

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

b N=29 for indicated correlations

family drinking and physical violence [$r = -.38$, $p < .05$]. As family drinking increases, father report of child physical violence toward him decreases. It is possible that these results may be due to children being in greater fear of their fathers in heavier drinking families and are consequently less likely to act out towards them.

Regarding mothers, the results indicate that a relationship exists between family drinking density and mother report of child aggression toward her in resolving conflict. Significant positive correlations exist between family drinking and child total violence, verbal aggression, and indirect physical aggression. As family level of drinking problems increases, so also does child rates of aggression toward the mother. These children in heavier drinking families apparently do not have the same fear of mothers as they do of fathers, since no negative relationships exist between alcohol use and child aggression to mothers.

Analyses regarding the relationship between family drinking problems and combined (summed) parent report of child aggression are presented in Table 22. When parent reports of child aggression are pooled, a significant positive relationship is found between family drinking and total violence, as well as subscales of verbal aggression and indirect physical aggression/threats. As level of family drinking trouble increases, child aggression toward parents increases.

In summary, when examining the relationship between family alcohol related difficulty and child aggression toward parent, the

Table 22

Relationship of Family Drinking Density Score to Combined Reports of Child Aggression to Parents- Pearson R's (N=29)

Aggression to Parents	Relationship of family drinking to combined reports of child aggression
Total Violence	.52 ** b
Reasoning	.21
Verbal Aggression	.45 **
Indirect Physical Aggression/Threats	.47 **
Physical Violence	.02 b
Severe Physical Violence	.11

** $p \leq .01$

b N= 28 for indicated correlations

results also indicate that as family drinking trouble is high, child aggression toward parent also is high. These relationships are slightly more robust than those comparing family drinking and parent aggression toward child. It may be that parents have difficulties admitting of their own aggression toward their children. However, they may more readily report their children's aggression, because they perceive it as misbehavior, rather than the usage of violence. It is also possible that heavier drinking families are more chaotic and these parents less often discipline their children; or, children in these families may identify with parents when punished aggressively, so there is an increase in modelled aggression (Eron, 1987). Last, these families may be so heavily involved in spousal conflict that dealing with their children may be more peripheral in their concerns. In consequence, their children's aggressive behaviors continue to escalate. These alternatives eventually need to be explored via more direct behavioral interaction studies.

7. Relationships between Family Violence and Current Alcohol Consumption

Last, it had been hypothesized that measures of current alcohol consumption would show a stronger relationship to individual and familial violence than would lifetime measures of alcohol involvement. Current drinking difficulty is assessed by Cahalan, Cissin & Crossley's (1969) Quantity-Frequency-Variability (QFV) index of extent of drinking in the last six months. Results

indicate that wife current drinking is not related to spousal aggression (See Appendix B1-B2). Therefore, the following sections on spousal aggression report the findings only in relation to husband's current drinking.

7.1 Spousal Aggression

7.1.1 Husband aggression to wife and husband current drinking

It was hypothesized not only that higher rates of husband aggression to wife would be associated with higher husband alcohol use, but also that this association would be higher with a measure of current alcohol consumption than it would be for a lifetime involvement measure. At the outset it should be noted that this hypothesis was disconfirmed. Although the pattern of significant correlations involving Q-F-V (the current alcohol consumption measure) varies somewhat from the drinking density correlations, in no instance in this section (7.1), or in the following ones (7.2 and 7.3) were the Q-F-V and drinking density r 's significantly different from each other. What follows is simply a description of the Q-F-V aggression findings: the reader needs to be aware that they fairly closely parallel the drinking density findings, although in a few instances the details vary.

Results testing the current consumption versus husband aggression hypothesis, reported separately by husbands and wives, are presented in Table 23. Regarding husband perception, no relationship exists between husband's current drinking and husband's report of violence to wife. Regarding wife perception,

Table 23

Relationship of Husband Current Drinking to Husband Aggression to Wife- Pearson R's (N=30)

Aggression to Wife	Relationship of husband drinking to husband report of aggression to wife	Relationship of husband drinking to wife report of husband aggression
Total Violence	-.14	-.03 b
Reasoning	.16	.37 * b
Verbal Aggression	-.17	-.02 b
Indirect Physical Aggression/Threats	.15	-.04
Physical Violence	.24	.06
Severe Physical Violence	.27	-.19

* $p \leq .05$

b N= 29 for indicated correlations

a significant positive relationship exists between husband's drinking and wife's report of husband reasoning. High levels of husband current alcohol use are associated with greater wife reports of husband reasoning. As previously noted, it was not expected that there would be a significant positive relationship between drinking and wife's reports of husband's reasoning as a means of conflict resolution. This will be discussed in a later section. And although higher rates of husband aggression to wife, reported by both husband and wife, are found with greater lifetime involvement (see Table 8), those relationships are not significantly different than these regarding current alcohol use.

7.1.2 Wife aggression to husband and husband current drinking

It was also hypothesized that wife aggression to husband would be positively related to current alcohol use, although not as strongly as for husband aggression to wife. These results are presented in Table 24. Regarding wife perception, no relationship is found between husband's current alcohol intake and wife reports of aggression to husband. Regarding husband perception, no relationship is observed between husband current drinking and wife aggression to husband.

7.2 Parent Aggression to Child

It was also predicted that there would be higher rates of violence toward children in families with current heavier drinking, and that these relationships would be stronger than those using measures of lifetime alcohol involvement. These

Table 24

Relationship of Husband Current Drinking to Wife Aggression to
Husband- Pearson R's (N=30)

Aggression to Husband	Relationship of husband drinking to wife report of aggression to husband	Relationship of husband drinking to husband report of wife aggression
Total Violence	.23	-.31
Reasoning	.26	-.13
Verbal Aggression	.24	-.32
Indirect Physical Aggression/Threats	-.23	-.21
Physical Violence	.18	-.06
Severe Physical Violence	-.28	.25

results are presented in Table 25. A significant negative relationship exists between father current drinking and severe physical violence of father toward child. Higher current alcohol consumption by fathers is associated with lower levels of severe physical aggression by him. There is no relationship between father current alcohol use and mother aggression toward child.

A negative relationship exists between mother current drinking and physical violence by mother toward child. Mothers with higher current alcohol consumption levels report less physical violence toward their child than do those with lower drinking levels. So contrary to the hypothesis regarding current alcohol use, a significant negative relationship exists between parent drinking and that parent's aggression to child.

7.3 Child Aggression to Parent

It was also predicted that there would be higher rates of child violence toward parents in families with heavier current drinking, and that these relationships would be stronger than those using measures of lifetime alcohol involvement. These results are presented in Table 26. Taken together, the results show that a significant negative relationship exists between both father and mother current drinking and child indirect, physical and severe physical violence toward father. As father and mother current alcohol use increases, rates of aggression by child toward father decrease. It is not clear why there is a relationship association between current drinking and decreased child

Table 25

Relationship of Parent Current Drinking to own and Spouse's Aggression to Child- Pearson R's (N=29 for Fathers and N=30 for Mothers)

Aggression to Child	Relationship of parent drinking to his/her own reported aggression	Relationship of parent drinking to spouse's reported aggression
(A) <u>Father</u> Drinking and Parent Aggression to Child		
Total Violence	-.13	.32

Reasoning	.10	.08
Verbal Aggression	.15	.24
Indirect Physical Aggression/Threats	.02	.31
Physical Violence	-.25	.27
Severe Physical Violence	-.37 *	-.26
(B) <u>Mother</u> Drinking and Parent Aggression to Child		
Total Violence	-.23	.26

Reasoning	.09	-.02
Verbal Aggression	.06	-.25
Indirect Physical Aggression/Threats	-.30	.29
Physical Violence	-.36 *	.25
Severe Physical Violence	.07	.06

* $p \leq .05$

Table 26

Relationship of Parent Current Drinking to Child Aggression to Self and Spouse- Pearson R's (N=29 for Fathers and N=30 for Mothers)

Aggression to Parent	Relationship of parent drinking to child aggression to him/her	Relationship of parent drinking to child aggression to spouse
(A) <u>Father</u> Drinking and Child Aggression to Parent		
Total Violence	.07	.10 b
Reasoning	-.08	.03
Verbal Aggression	.15	.09
Indirect Physical Aggression/Threats	-.22	.21
Physical Violence	-.42 *	.03 b
Severe Physical Violence	-.39 *	-.04
(B) <u>Mother</u> Drinking and Child Aggression to Parent		
Total Violence	-.12 b	-.16
Reasoning	.16	.23
Verbal Aggression	.04	-.08
Indirect Physical Aggression/Threats	-.20	-.35 *
Physical Violence	-.22 b	-.37
Severe Physical Violence	-.02	.07

* $p \leq .05$

b N=29 for indicated correlations

aggression to father, but not one for mother. But here also, as in the previous section, there is no evidence for a significantly stronger relationship, or better predictability, involving parent current consumption. In no instance where tests of these correlations for difference were run were any of the effects significant.

In summary, hypotheses regarding a strong positive relationship between current drinking and family violence are not confirmed. No relationship exists between husband current drinking and aggression to wife. Unexpectedly, as current alcohol use increases, there is a decrease in parent and child aggression. No significant differences are found between long term and current drinking indicators as predictors of family aggression. Contrary to expectations, there is no greater predictability involving current alcohol consumption measures.

8. Models of Prediction

All of the relationships described so far are based on single cause theories of effect. Even though the sample sizes here are small, it is appropriate in an exploratory way to test a more comprehensive multivariate model of causation. Hierarchic regression models were formulated to predict the occurrence of violence; one model was hypothesized to predict husband physical violence to wife and one to predict parent violence to child. These models are diagrammed in Figures 2 and 3, respectively.

Figure 2

Hierarchic Model of Husband Violence to Wife

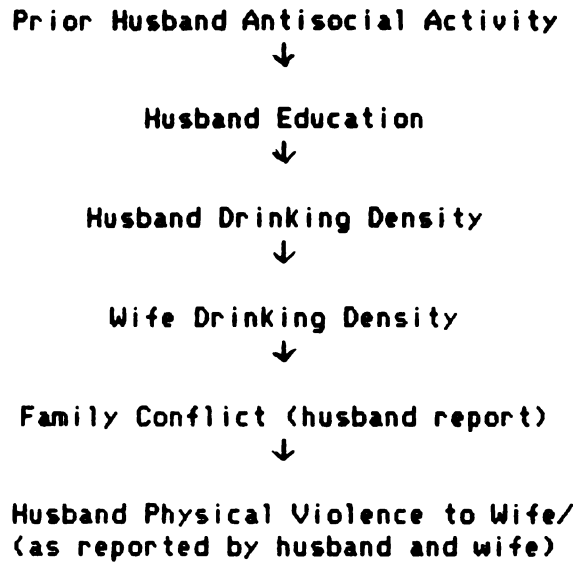
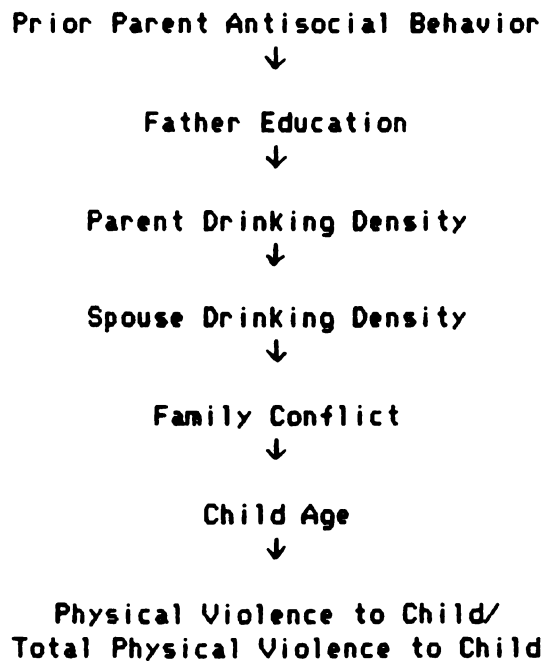


Figure 3

Hierarchic Model of Parent Aggression to Child



8.1 Husband violence to wife:

In predicting husband physical violence to wife (husband and wife report), the variables used were entered in the following order : (1) husband prior antisocial activity, (2) husband education, (3) husband drinking density score, (4) wife drinking density score, and (5) Moos Family Conflict (husband report). This specific order was used for several reasons: (a) It was believed that those males engaging in high rates of early antisocial activity would also have lower levels of education. Also, (b) a negative relationship was found between husband long term alcohol involvement and education; husband education level decreases with increased drinking. (c) It was anticipated that high rates of antisocial activity and low levels of education would lead to high rates of long term alcohol involvement. (d) Carrying the model further, it was anticipated that antisocial, heavier drinking males are then more likely to marry women who are also higher in long term alcohol involvement. (e) The long term consequence of these relationships is the expectation that the marital pair will experience much conflict, and this will in turn lead to husbands' aggression to wives.

The regression analysis for husband report of physical violence is given in Table 27. The equation accounts for 58 percent of the variance. Husband prior antisocial activity, his drinking, and the family conflict measure were the significant predictive variables. For the collateral data from wives, i.e.,

Table 27

Hierarchic Regression Analysis of Husband Physical Violence to Wife

(A) Prediction using Husband Report of his Violence

Multiple R .76
R square .58

Analysis of Variance: $F(5,21) = 5.76 (p \leq .001)$

<u>Variable</u>	<u>r</u>	<u>R</u> ²	<u>R Change</u> ²	<u>F Change</u>	<u>Beta In</u>
1) Husband prior antisocial activity	.53	.28	.28	9.73 **	.53
2) Husband education	-.25	.31	.03	.95	-.17
3) Husband drinking	.66	.46	.15	6.34 *	.55
4) Wife drinking	.13	.48	.03	1.10	.16
5) Family conflict	.56	.58	.10	4.75 *	.39

* $p \leq .05$, ** $p \leq .01$

(B) Prediction using Wife Report of his Violence

Multiple R .75
R square .57

Analysis of Variance: $F(5,21) = 5.55 (p \leq .001)$

<u>Variable</u>	<u>r</u>	<u>R</u> ²	<u>R Change</u> ²	<u>F Change</u>	<u>Beta In</u>
1) Husband prior antisocial activity	.14	.02	.02	.51	.14
2) Husband education	-.30	.10	.08	2.11	-.29
3) Husband drinking	.40	.19	.10	2.73	.44
4) Wife drinking	.40	.36	.16	5.46 *	.41
5) Family conflict	.68	.57	.21	10.44 ***	.59

* $p \leq .05$, *** $p \leq .001$

the wife report of husband physical violence, the resulting regression equation has an almost identical R^2 (0.57) but a somewhat different set of predictive variables. Family conflict is highly significant, but husband's prior antisocial no longer does any predictive work. Instead, wife's drinking enters the equation-- and positively predicts the perception of his aggression. The most appropriate formulation that is suggested across these two analyses is that family conflict is critical in husband's perceived aggression, irrespective of who perceives it. So also is self drinking of the perceiver. The details of why this might be so remain to be explored with a larger sample of families.

8.2 Violence toward Child:

Hierarchic regressions were also performed to predict physical violence and total physical violence of mother and father to child. The predictor variables used were entered in the following order: (1) parent prior antisocial activity, (2) father education, (3) parent drinking density score, (4) spouse drinking density score, (5) Moos Family Conflict, and (6) child age. As with husband aggression to wife, this specific order was used for several reasons: (a) It was believed that those parents engaging in high rates of early antisocial activity would also have lower levels of education. Also, (b) a negative relationship was found between father long term alcohol involvement and education; as father education levels increases, drinking decreases. (c) It was anticipated that high rates of antisocial activity and low levels

of education would lead to high rates of long term alcohol involvement. (d) Carrying the model further, it was anticipated that antisocial, heavier drinking males are then more likely to marry women who are also higher in long term alcohol drinking. (e) The long term consequence of these relationships is the expectation that the marital pair will experience much conflict, and this will in turn lead to aggression to their child. (f) Also, child age was considered important in predicting parental violence toward child.

For fathers, the overall regression equation for physical violence was not significant (Table 28). However, family conflict was a significant predictor and mother drinking density score tended towards significance. For father total physical violence to child, the regression equation accounted for 45 percent of the variance. Family conflict was a significant predicting variable and mother drinking tended toward significance. For mother physical violence to child, R^2 was .45 (Table 29). Child age was a significant predicting variable; mother prior antisocial activity and father drinking tended toward significance. For mother total physical violence to child, the overall regression equation was not significant. However, mother prior antisocial activity was found to play a significant role in the predictive equation.

In summary, family conflict is a variable that accounts for a substantial amount of the variance in predicting violence of husband toward wife and parent toward child in a consistent

Table 28

Hierarchic Regression Analysis of Father Physical Violence to Child

I. Physical Violence

Multiple R .60
R square .36

Analysis of Variance: $F(6,20)=1.84 (p \leq .15)$

<u>Variable</u>	<u>r</u>	<u>R</u> ²	<u>R Change</u> ²	<u>F Change</u>	<u>Beta In</u>
1) Father prior antisocial activity	-.07	.00	.00	.12	-.07
2) Father education	.20	.04	.04	.96	.20
3) Father drinking	-.15	.05	.00	.09	-.09
4) Mother drinking	.36	.17	.13	3.37 +	.36
5) Family conflict	.41	.33	.16	5.05 *	.50
6) Child age	-.24	.36	.16	.70	-.17

+ $p \leq .10$, * $p \leq .05$

II. Total Physical Violence

Multiple R .67
R square .45

Analysis of Variance: $F(6,20)= 2.73(p \leq .05)$

<u>Variable</u>	<u>r</u>	<u>R</u> ²	<u>R Change</u> ²	<u>F Change</u>	<u>Beta In</u>
1) Father prior antisocial activity	-.06	.00	.00	.09	-.06
2) Father education	.24	.06	.05	1.36	.23
3) Father drinking	-.05	.06	.01	.20	.13
4) Mother drinking	.35	.18	.11	3.03 +	.34
5) Family conflict	.65	.45	.27	10.30 ***	.65
6) Child age	-.04	.45	.00	.05	-.04

+ $p \leq .10$, *** $p \leq .001$

Table 29

Hierarchic Regression Analysis of Mother Physical Violence to Child

1. Physical Violence

Multiple R .67
R square .45

Analysis of Variance: $F(6,20)=2.74(p \leq .05)$

<u>Variable</u>	<u>r</u>	<u>R</u> ²	<u>R Change</u> ²	<u>F Change</u>	<u>Beta In</u>
1) Mother prior antisocial activity	.37	.14	.14	3.95 +	.37
2) Father education	-.10	.14	.00	.80	-.05
3) Mother drinking	.11	.14	.00	.89	.03
4) Father drinking	.37	.24	.10	.10 +	.36
5) Family conflict	.20	.24	.00	.94	-.02
6) Child age	-.32	.45	.21	.01 **	-.51

+ $p \leq .10$, ** $p \leq .01$

II. Total Physical Violence

Multiple R .57
R square .33

Analysis of Variance: $F(6,20)=1.61(p=.20)$

<u>Variable</u>	<u>r</u>	<u>R</u> ²	<u>R Change</u> ²	<u>F Change</u>	<u>Beta In</u>
1) Mother prior antisocial activity	.41	.17	.17	5.10 *	.41
2) Father education	-.17	.18	.01	.41	-.12
3) Mother drinking	.12	.18	.00	.03	.03
4) Father drinking	.32	.23	.05	1.34	.24
5) Family conflict	.23	.23	.00	.01	.03
6) Child age	-.17	.33	.09	2.76	-.17

* $p \leq .05$

manner. In addition, mother drinking plays a significant role in the father-violence-to-child equation and father drinking predicts mother violence to child. These results are consistent with univariate results previously discussed and give credence to thinking in systems terms about the relationships between alcohol use and family violence.

CHAPTER IV

GENERAL DISCUSSION

The present study was designed to investigate the presence of violence in heavier drinking families. As commonly observed in the literature, it was hypothesized that higher rates of prior antisocial activity would be observed in the personal histories of heavier drinking families. Also observed in the literature, it was hypothesized that higher rates of family conflict and dissatisfaction would be found in heavier drinking families. Finally, it was anticipated that a relationship between higher rates of family violence and higher rates of drinking would be found.

Several more detailed predictions were made regarding the relationship between drinking and family violence. First, it was suggested that higher rates of spousal violence would be associated with increased levels of drinking problems in these families. Higher rates of violence were expected among both husbands and wives; however, this relationship was expected to be even stronger for violence initiated by husbands. Second, it was hypothesized that higher rates of parental violence towards children would be found in heavier drinking families. Third, measures of current alcohol consumption would show a stronger relationship to individual and familial violence than would measures of lifetime alcohol involvement. This section highlights

the results of these hypothesis tests, as well as discusses other pertinent and interesting findings.

1. Relationship between rates of prior antisocial activity and personal histories of heavier drinking.

As hypothesized, the data demonstrate a strong positive relationship exists between father prior antisocial behavior and long term alcohol use. This relationship is found for total antisocial behavior, as well as for all antisocial behavior subscale scores. Although not quite as strong as the father relationship, a positive relationship is found between mother drinking and total antisocial behavior, as well as for subscale measures of delinquent and sexual behavior. It was suggested that the combination of high rates of antisocial behavior and family conflict in heavier drinking families would provide the basis for higher rates of family violence. These results illustrate that higher rates of prior antisocial behavior are strongly connected with higher lifetime rates of family and individual drinking difficulty.

2. Relationship between rates of family conflict/dissatisfaction and heavier drinking.

As predicted, paper-and-pencil measures (Moos FES) show that a significant positive relationship exists between perceptions of family conflict for both mothers and fathers and family drinking; as drinking increases, family conflict increases. In addition, as family drinking increases, father report of family cohesion

decreases. However, these results are weaker in comparison to the relationships of antisocial behavior and drinking.

Number of separations from all marriages was considered to be an alternative, face valid measure of conflict; so this index was also used to test the hypothesis. These results demonstrate a strong positive correlation exists between marital separations and drinking in families, with more separations observed in heavier drinking families.

Taken together, these data indicate that a strong positive relationship exists between family conflict and alcohol consumption. As hypothesized, higher rates of antisocial behavior and marital conflict do exist in heavier drinking families. As noted, these proven hypotheses form the basis for expecting a relationship to exist between drinking and family violence. It is shown that high rates of antisocial behavior and conflict exist in heavier drinking families. The next logical step is that high rates of violence also exist in these families.

3) Measures used for drinking and family violence

As demonstrated in the results section, there are many different ways one can go about examining the relationship between alcohol use and family violence. Many aspects of drinking can be considered-- amount of current drinking, long term alcohol consumption, family drinking, problems related to alcohol use, and so on. In addition, different types of family violence can be examined-- spousal violence, violence toward child and parent, as

well as sibling violence. Also, violence can be reported by different family members, so that one can gather different perceptions of violence that occurs in families. Then one needs to decide which information is most accurate and useful in reporting results. In some ways it may have been easier to use one type of drinking score and fewer aspects of family violence, and therefore present results that appear more comprehensive. However, it is also important to see how various drinking scores may be related to different types of family violence. The following sections integrate some of these findings.

4) Higher rates of violence and higher rates of reasoning in heavier drinking families

It was hypothesized that higher rates of family aggression and lower rates of reasoning would be used in resolving conflict in heavier drinking families. The results indicate (1) that a positive relationship does exist between greater long term alcohol consumption and family aggression. (2) However, the results also often illustrate positive trends between long term drinking and the greater use of reasoning when resolving conflict. On second thought, it makes good sense that this positive relationship exists, because conflictual families will need to use reasoning more often than do families not experiencing difficulties. Families do not begin by hitting each other when resolving problems. They will first utilize reasoning; only when this does not work will they use more aggressive techniques. So the

positive relationship between family violence and reasoning further illustrates that heavier drinking families have higher rates of conflict and use higher rates of reasoning to resolve their interpersonal difficulties. In addition to higher rates of reasoning, heavier drinking families also use a preponderance of aggression in resolving conflict.

5) Long term alcohol involvement: Individual drinking density scores versus family drinking density scores

The relationship between long term alcohol related difficulty and family violence was examined in two separate ways: individual drinking density scores (fathers and mothers) and family drinking density scores. As previously noted, the idea of family drinking enables one to examine the long term alcohol consumption of the family as a couple, rather than as individuals. In this way one can crudely assess how alcohol use of the couple system affects the amount of aggression that takes place in a family. Many significant results were found when using the family drinking density score. Table 30 represents an effort to tally these results, contrasting the alternative (individual vs. family) measures of drinking as they predict stronger or weaker associations with violence.

For the most part, the data in Table 30 illustrated that there were as many, and often more significant results when using the family drinking density score, in comparison to the individual drinking density score. These are both interesting and exciting

Table 30
Family Violence Tallies: Number of significant results

	Number	Percent significant results
1. Husbands' Aggression to Wives		
a) Husband DDS		
Husband report	2	40 %
Wife report	1	20 %
b) Wife DDS		
Husband report	0	0 %
Wife report	1	20 %
c) Family DDS		
Husband report	2	40 %
Wife report	1	20 %
d) Husband QFV		
Husband report	0	0 %
Mother report	0	0 %
2. Wives' Aggression to Husbands		
a) Husband DDS		
Husband report	0	0 %
Wife report	1	20 %
b) Wife DDS		
Husband report	0	0 %
Wife report	2	40 %
c) Family DDS		
Husband report	1	20 %
Wife report	3	60 %
d) Husband QFV		
Husband report	0	0 %
Wife report	0	0 %

Table 30 (cont'd)

	Number	Percent significant results
3. Fathers' Aggression to Children		
Father DDS	0	0 %
Mother DDS	2	40 %
Family DDS	0	0 %
Father QFV	1 (negative)	20 %
Mother QFV	0	0 %
4. Mothers' Aggression to Children		
Father DDS	1	20 %
Mother DDS	0	0 %
Family DDS	1	20 %
Father QFV	0	0 %
Mother QFV	1 (negative)	20 %
5. Pooled Parents' Aggression to Children		
Family DDS	2	40 %
6. Children's Aggression to Fathers		
Father DDS	1	20 %
Mother DDS	0	0 %
Family DDS	3 (1 negative)	60 %
Father QFV	2 (negative)	40 %
Mother QFV	1 (negative)	20 %
7. Children's Aggression to Mothers		
Father DDS	2	40 %
Mother DDS	0	0 %
Family DDS	3	60 %
Father QFV	0	0 %
Mother QFV	0	0 %
8. Pooled Children's Aggression to Parents		
Family DDS	3	60 %

Note: Reasoning results not included because the tallies are designed to show significant number of alcohol-aggression findings, and reasoning is not considered to be an aggressive activity.

findings, and suggest that the alternative, of a system view of family behavior, is at least as good in a predictive sense, as are the relationships based upon an individual conceptualization of behavior.

6) Current drinking versus long term alcohol involvement in relation to family violence

It was hypothesized that more family aggression would be found in families with higher rates of current drinking, as opposed to long term alcohol related trouble. However, significant differences were not found in strength of relationships between any of the long term and current drinking measures. In addition, significant positive relationships were consistently found between long term drinking involvement and family aggression. Nonetheless, it seemed plausible that those families more recently involved in heavier drinking would be even more conflictual and volatile in nature, and would show more aggression among family members. However, no relationships were found between either husband or wife current drinking and spousal aggression that would justify this line of reasoning. In addition, the data indicate that as current parent alcohol use increases aggression decreases between parent and child.

In comparing to other research, it should be noted that both Steinglass and Jacob have posited and empirically demonstrated that the alcoholic's drinking may at times have adaptive consequences for family functioning. Dunn, Jacob, Hummon, and

Sulkamer (1987) found that high-rate drinking among in-home drinkers is likely to be reinforced and associated with positive consequences. The results of the present study indicated that no relationship exists between current parent alcohol consumption and spousal aggression, and there is a decrease in aggression between parent and child. It is unclear whether this decrease in aggression is indicative of adaptive and positive consequences of family functioning from drinking or not.

An alternative view is that there is less aggression among family members because there is increased difficulty and tension with greater current alcohol consumption, and family members are careful to stay away from each other. This view is consistent with Wiseman's (1981) interviews with alcoholic wives, who suggest that sober states are nonnormal periods for alcoholics and are often associated with great tension and hypersensitivity. It is important to examine these complex relationships more closely with a larger sample size, and to contrast families with different aged children. Our own work is with young (4-1/2 to 5 year olds). The mean age of the parents in the Dunn et al. studies was 40, which is ten years greater than the present study; so it is likely that the children in their study are in their adolescent years where a considerably different set of family dynamics would be expected to operate (Haley, 1980).

7) Relationship of spousal aggression and long term alcohol use

It was hypothesized that a positive relationship exists between spousal violence and alcohol consumption. It was predicted that this relationship would be stronger for husband aggression to wife, rather than for wife aggression to husband. The relationship between long term alcohol use and husband aggression to wife was examined, as well as wife aggression to husband.

It had been hypothesized that there would be a stronger relationship for husband aggression to wife and alcohol use than for wife aggression to husband. The present data show no differences. Positive relationships were found between long term alcohol use and husband aggression to wife when the alcohol measures used were (a) husband drinking density score (20 % of the husband report rs are significant, 40% of the wife report rs are significant); (b) wife drinking density score (0 % of the husband report, 20 % of the wife report); and (c) family drinking density score (40 % of the husband report, 20 % of the wife report) (See Table 30 for Family Violence Tallies). As one can see, these relationships are strongest when the measure of alcohol involvement is either the husband drinking density score or the family drinking density score. And with considerable consistency, both husbands and wives, report higher rates of husband aggression with higher rates of husband alcohol use.

The relationship between long term drinking and wife aggression to husband was also examined. Positive relationships

were found between wife aggression to husband and alcohol use when the measures used were (a) husband drinking density score (20 % of the wife reports are significant, 0 % of the husband reports); (b) wife drinking density score (40 % of the wife reports, 0 % of the husband reports); and family drinking density score (60 % of the wife reports, 20 % of the husband reports). As one can see, these relationships are even stronger for wife report than for husband report. Husbands may have a difficult time seeing their wives' behaviors as aggressive and so attenuate what actually takes place; the wives appear to wear no such blinders.

There is a significant positive relationship between husband aggression to wife and long term alcohol consumption, considering both husband and wife report; however, the relationship is somewhat stronger for husband report. The relationship between wife aggression to husband and alcohol use is very strong for wife report; there is little relationship for husband reports. It appears that these relationships are stronger for those individuals who are reporting on their own behaviors (e.g., husband reporting on his aggression to wife, wife reporting on her aggression to husband). It appears that these respondents are more sensitive to their own behaviors than those of their spouses.

8) Relationship of parent aggression to child and long term alcohol use

It had been hypothesized that a relationship exists between long term alcohol use and parent aggression to child. The results

were unexpected and very interesting: as mother drinking increases, father aggression to child increases, and as father and family drinking increases, mother aggression to child increases. How are these findings to be understood? It is possible that the drinking individual is less involved in child care, and the distressed spouse utilizes more aggression in dealing with child conflicts and child misbehavior. Also, the drinking individual may be experiencing more denial in terms of his/her difficulties and deny aggressive behaviors toward his/her child. The nondrinking spouse may not be as invested in denying child behavior problems and the need to use aggressive behaviors in order to resolve conflict with his/her child. Clearer relationships appear present between long term alcohol use and spousal aggression than for alcohol use and parent aggression to child.

9) Relationship of child aggression to parent and long term alcohol consumption

Although no formal predictions were made, another area of interest was the relationship of child aggression to parent and parent drinking. Because of the conflict and chaos observed in heavier drinking families, it was thought that children would be more aggressive toward their parents. In addition, it was felt that because of society's current sensitivity to issues of child abuse, a parent might be reluctant to report aggressive behaviors to their child, but more likely to report aggressive child

behavior. If this were so, then child aggression to parent, as reported by each parent, could be considered an index of the amount of aggression that actually takes place in the families. Using this perspective, the present study shows (a) that lifetime history of parent alcohol difficulty is positively related to level of aggression in the family, and (b) that high levels of current parent drinking suppress levels of overt child aggression-to fathers, at least within the preschool age range of children (and families) examined here.

Positive relationships were found for child aggression to father when the alcohol measures used were (a) father drinking density score (20% of the relationships were significant); and (b) family drinking density score (40% of the relationships were positive and 20% were negative). Positive relationships were found for child aggression to mother when the alcohol measures used were (a) father drinking density scores (40%); and (b) family drinking density scores (60%). These results clearly illustrate that higher levels of child aggression exist in families with fathers who have higher rates of long term alcohol use. However, with higher levels of family drinking difficulty, it is found that these children are more verbally aggressive toward their fathers, but less physically aggressive toward them, quite possibly because they are afraid of them. Indeed, although causal statements cannot be made, it is likely that higher rates of child aggression in families with heavier drinking fathers may be considered an

index of the turbulence, conflict, and aggression that occurs in these families.

The present results, and the network of family linkages they suggest are in clear accord with those found in another substudy of the MSU Longitudinal project (Baxter-Hagaman, 1986). Alcoholic families were compared with community controls, utilizing a participant-observer methodology and extensive field observations in the home. Baxter-Hagaman describes these families as follows:

Target boys live in a context of chronic conflict with harsh, rejecting and/or labile parents. Not only was the target child exposed to confused sex-role models, but he often was triangulated into parent conflicts. Marked parental preferences were frequently observed. Early signs of increased activity level, aggression and impulsivity were observed in Alcoholic target children, possibly due to the complex reciprocal effects of the child's own temperament, parental role models and noncontingency in the family environment. (p. 254)

10) Predictive Models of Violence

As already described, hierarchical regression models were constructed, to gain a better multivariate understanding of the occurrence of violence in these families. Results of the regression analyses indicate that family conflict was the one variable most consistently predicting both spousal aggression and parental aggression to child. After that, the results become less consistent. Husband drinking was found to predict husband reports of physical violence toward wife, and mother violence toward child. Wife drinking was found to predict wife report of husband total physical violence toward her. Regarding mother violence

toward child, mother prior antisocial activity, husband drinking, and child age were found to be important predictor variables.

These results should be considered as first steps in gaining an understanding of the conceptual structure of violence in families. They clearly indicate that family conflict does predict violence. In addition, both mother and father drinking appear to play some role in the equation; however, these relationships are less clear and need both further elaboration and replication.

11) Limitations of the study

The results clearly indicate that there is an increase in aggression with an increase in alcohol use. Approximately 22% of the findings were significant, with virtually all results in the anticipated direction. Nonetheless, more fine grained analyses on subgroups would have been desirable, but were not possible with this study as constituted by small sample size. Lack of power and resultant increase in Type II error legislated against this. Another issue is that results were strongest for the family drinking density score; however, it is unclear whether these stronger effects were solely attributed to the enhanced reliability obtained from the pooling or aggregation of data (Epstein, 1984), or whether they reflect genuine results of a crude systems analysis. Were the latter explanation correct, it would suggest that a systems conceptualization is the more effective way to conceptualize and explain intrafamilial violence.

But the present study does not allow us to decide between these alternative hypotheses.

12) Future directions

It is important to return to the literature to see how this work fits with that of other studies. As initially noted, little research documents the relationship between alcohol consumption and family violence and much of the existing research is plagued with methodological problems. The results of this study clearly document a relationship between long term alcohol use and aggression among family members. These findings are in accord with those of the national survey completed on family violence; Coleman and Straus (1983) found a relationship between family violence and frequency of drunkenness. Their interview study included people between the ages of 18 and 65. Information obtained about children included the age range from 3 to 17. In their study, they found the relationship to be a curvilinear one. Individuals who were frequently drunk were more abusive than those who were seldom drunk; however those who were "very often" or "almost always" drunk were among the least violent subjects. It is difficult to know what to make of their findings; they undoubtedly collapse and fuse occurrences that take place over a number of disparate developmental stages for parents, and for children. Given this confounding it is not clear whether their reported relationship was genuinely curvilinear, within developmental stage, or whether it was spuriously so. The data

here indicate that a linear model does quite well in predicting the relationship.

Black and Mayer (1978) examined child-rearing practices of 100 alcoholic and 100 opiate-addicted parents with children under the age of 18; they found that 27% of the 100 alcoholic parents had abused and/or neglected their children. They found alcoholic mothers more likely to have maltreated their children than alcoholic fathers, a finding consistent with studies of nonalcoholic samples. However, because of methodological problems and confounding variables, these results cannot be compared to the present study. In their sample alcoholic mothers were also more likely than alcoholic fathers to head single-parent families and be economically poor. If married, they were likely to have spouses with alcohol or drug problems. They found that the maltreating alcoholic parents differed from nonmaltreating ones on other variables as well. Maltreating alcoholic parents had more disrupted childhoods, were more likely to have been physically abused as children, and were less likely to have been raised in two-parent families. In addition, they were also more likely to have parents with alcohol or drug problems. Last, developmental stage of family is mixed in this study.

In examining the literature on alcohol abuse and family violence, Steinglass and Robertson (1983) noted the need to control for social class and sex of abuser in further research, since the relationship between alcohol and family violence may be dependent upon these variables. Coleman and Straus (1983) found

that social class differentiated fathers, but not mothers for child abuse. Their results indicated that less child abuse exists than spouse abuse, and that mothers were more abusive than fathers to children-- across social classes and at each level of drunkenness. Blue collar fathers were more abusive than white collar fathers, but both blue and white collar mothers were more abusive than fathers. The present study in fact illustrates a negative relationship between father education and drinking density scores; greater long term drinking difficulty is associated with lower educational level. In contrast to Coleman and Straus' results, a negative trend was found in the present study between mothers' educational level and their levels of aggression toward their children; higher rates of violence are associated with lower education levels. Unlike the national survey, this relationship was not found for fathers. It is not possible to compare results of the present study with those of the national survey, because the present study is considerably more restricted in range.

It is also important to understand the present research in relation to the current understanding of the alcoholic family in the literature. This study shows that families with long term drinking difficulty also have higher rates of prior antisocial activity, experience greater marital conflict, and report a preponderance of aggression amongst family members. This picture of alcoholic families is consistent with much of the literature, as well as with earlier results from pilot work on the MSU

Longitudinal Project (Zucker, Weil, Baxter, & Noll, 1984b; Baxter-Hagaman, 1986).

More recently, researchers in the alcoholism field have focused their energies on a behavioral-systems view of the alcoholic family (e.g., the work of Steinglass and Jacob), utilizing interactional data in the home and laboratory to gain a better perspective of how the alcoholic family system functions. Both Jacob and Steinglass' data suggest that the alcoholic's drinking at times can have a stabilizing and adaptive influence on the family, which reinforces the continuation of drinking.

The focus of current research has examined more closely the relationship between the alcoholic's drinking and family functioning (Jacob et al., 1983; Steinglass & Robertson, 1983; Dunn et al., 1987). Independent variables considered included type of drinking (binge versus steady drinking) and location of drinking (inside versus outside home). Dunn, Jacob, Hummon, and Seilhamer (1987) found that high-rate drinking among in-home drinkers is likely to be reinforced and associated with positive consequences. Alternatively, for both binge drinkers and steady out-of-home drinkers, there "appears to be greater individual pathology than with steady, in-home drinkers, and the drinking pattern is extremely variable, at times chaotic, and is not incorporated into family life" (p.106). This study identified a causal relation between alcohol consumption and marital stability and indicated the significant impact of drinking location on these relations. Results of the study are consistent with those of

Steinglass, indicating that high levels of alcohol consumption can have adaptive consequences for family functioning. In a parallel view, Wiseman's (1981) interviews with alcoholic wives suggest that sober states are nonnormal periods for alcoholics, and are often associated with great tension and hypersensitivity.

In view of these findings, it is important to more closely scrutinize some results of the present study. As already noted, clear positive relationships were found between long term alcohol involvement and family aggression. No significant relationships were established between current alcohol use and spousal aggression. However, increased current drinking was associated with less aggression to child by drinking parent. Also, higher levels of current parent drinking were associated with lower child rate of aggression toward the father. So increased aggression amongst family members occurs with increased long term alcohol use, and there is concomitantly a decrease in aggression between parent and child when there are higher levels of parent consumption. Thus, it seems important to continue to examine the relationships between various aspects of drinking behavior and how they differentially affect family functioning-- both positively and negatively. The roles of family developmental stage, and of each parent, in this complex process need to be more carefully charted. Then we will have a more truly comprehensive understanding of how violence occurs amongst family members.

APPENDICES

Appendix A
Conflict Tactics Scale-Revised

(57A)

TO BE COMPLETED FOLLOWING DIS QUESTION 209- p. 56

1a) In raising children, all of them are troublesome some of the time. At those times, parents and children sometimes use different ways of trying to settle these differences. I'm going to read a list of some things that () might have done when you had a dispute or disagreement. For each one, I want to ask you about ()'s behavior with you. Tell me how how often in the past year when you had a disagreement with (), he:

	<u>1a How often?</u>	<u>1b Age</u>	<u>1c Ever?</u>
a) Discussed the issue calmly with you.	_____	_____	_____
b) Got information to back up his side of things.	_____	_____	_____
c) Brought in or tried to bring in someone to help settle things.	_____	_____	_____
d) Insulted or swore at you.	_____	_____	_____
e) Sulked and/or refused to talk about it.	_____	_____	_____
f) Stomped out of the room or house(or yard).	_____	_____	_____
g) Cried.	_____	_____	_____
h) Did or said something to spite you.	_____	_____	_____
i) Threw or smashed or hit or kicked something, but not at you.	_____	_____	_____
j) Threatened to hit or throw something at you.	_____	_____	_____
k) Hit you or actually threw something at you.	_____	_____	_____
l) Pushed, grabbed, shoved, slapped you or spanked you.	_____	_____	_____
m) Used a belt on you.	_____	_____	_____
n) Kicked, bit, hit or beat you up.	_____	_____	_____
o) Threatened to or used a knife or gun.	_____	_____	_____

(If Once or More than once answered to 1a, ask 1b):

1b) How young was () the first time he used this manner to settle things?

(If Never answered to 1a, ask 1c):

1c) During a disagreement with you, had () ever done the following things, and if so, when was the earliest time?

Scale of frequency:

Never, once, twice, 3-5 times, 6-10 times, 11-20 times, >20 times.

(57B)

2a) We've just talked about the ways your child is with you when the two of you have had a dispute or disagreement. Now I want to ask you about the way you are and what you do during these times. I am going to read a list of some things that you might have done. For each one, I would like you to tell me how often in the past year you did this with ()::

	<u>2a How often?</u>	<u>2b Age?</u>	<u>2c Ever?</u>
a) Discussed the issue calmly.	_____	_____	_____
b) Got information to back up your side of things.	_____	_____	_____
c) Brought in or tried to bring in someone to help settle things.	_____	_____	_____
d) Insulted or swore at your child.	_____	_____	_____
e) Sulked and/or refused to talk about it.	_____	_____	_____
f) Stomped out of the room or house(or yard).	_____	_____	_____
g) Cried.	_____	_____	_____
h) Did or said something to spite your child.	_____	_____	_____
i) Threw or smashed or hit or kicked something, but not at your child.	_____	_____	_____
2d) Bruises? _____			
j) Threatened to hit or throw something at your child.	_____	_____	_____
2d) Bruises? _____			
k) Hit or actually threw something at your child.	_____	_____	_____
l) Pushed, grabbed, shoved, slapped or spanked your child.	_____	_____	_____
2d) Bruises? _____			
m) Used a belt on your child.	_____	_____	_____
2d) Bruises? _____			
n) Kicked, bit, hit or beat up your child.	_____	_____	_____
2d) Bruises? _____			
o) Threatened to or used a knife or gun.	_____	_____	_____
2d) Bruises? _____			

(If 2a answered Once or More than once, ask 2b):

2b) How young was () the first time it was necessary to settle things this way?

(If 2a answered Never, ask 2c):

2c) During a disagreement with (), had you ever done the following things, and if so, when was the earliest time?

(For items i-n answered Yes, ask 2d and 2e): [see next page for 2e]

2d) Did this activity cause any bruises? Were they hard enough so that he had to stay in bed or see a doctor?

Scale of frequency:

Never, once, twice, 3-5 times, 6-10 times, 11-20 times, >20 times.

(57C)

2e1) (If any item of i-m answered as yes on 2a, ask the following at the end):

Let me ask a little more about some of the disagreements that occurred in the last year. (Interviewer: List items from i-m). Was any alcohol or any other drug used during the most recent time that this happened?

2e2) What was the drug?

2e3) How much did you have?

2e4) How long was it consumed before the disagreement with ()?

2e5) What was the nature of the disagreement after you had _____(drug)? What did you do?

3a) Now to a different area. About your own childhood, do you recall ever being physically punished or abused by your parents when you were a child or teenager?

3a) _____

(If question 3a was answered as yes, ask 3b):

3b1) By whom?

3b2) For what kind of disagreement?

3b3) How? What happened?

3b4) How often did this occur? (once or twice, monthly, weekly?)

3b5) What was your earliest age at which this occurred?

3b6) What was your oldest age at which this occurred?

3b7) Were there any typical circumstances for these occasions? (probe for alcohol or other drug use)

(57D)

4a) Even if you weren't (or were) physically abused, were you ever sexually abused by someone in your family, or by a neighbor or friend?

(If question 4a was answered as yes, ask 4b):

4b1) By whom?

4b2) How ? What happened?

4b3) How often did this occur?

4b4) What was your earliest age at which this occurred?

4b5) What was your oldest age at which this occurred?

4b6) Were there any typical circumstances for these occasions? (probe for alcohol or other drug use)

(57E)

Sa) Now I would like to ask you a few questions about your relationship with your (wife/husband). No matter how well a couple gets along, there are times when they disagree on major decisions, get annoyed about something the other person does, or just have spats or fights because they are in a bad mood or tired, or for some other reason. They also use many different ways of trying to settle their differences. I am going to read a list of some things that you and your spouse might have done when you had a dispute. I would like you to tell me, for each one, how often your spouse did it in the past year:

	<u>Sa How often?</u>	<u>Sb How long?</u>	<u>Sc Ever?</u>
a) Discussed the issue calmly.	_____	_____	_____
b) Got information to back up (his/her) side of things.	_____	_____	_____
c) Brought in or tried to bring in someone to help settle things.	_____	_____	_____
d) Insulted or swore at you.	_____	_____	_____
e) Sulked and/or refused to talk about it.	_____	_____	_____
f) Stomped out of the room or house(or yard).	_____	_____	_____
g) Cried.	_____	_____	_____
h) Did or said something to spite you.	_____	_____	_____
i) Threw or smashed or hit or kicked something, but not at you.	_____	_____	_____
j) Threatened to hit or throw something at you.	_____	_____	_____
k) Hit you or actually threw something at you.	_____	_____	_____
l) Pushed, grabbed, shoved, slapped or spanked you.	_____	_____	_____
m) Used a belt on you.	_____	_____	_____
n) Kicked, bit, hit or beat you up.	_____	_____	_____
o) Threatened to or used a knife or gun.	_____	_____	_____

(If Sa answered Once or More than once, ask Sb):

Sb) How long ago was the first time () needed to settle things in this manner?

(If Sa answered Never, ask Sc):

Sc) During a disagreement with you had your spouse ever done the following things, and if so, when was the earliest time?

Scale of frequency:

Never, once, twice, 3-5 times, 6-10 times, 11-20 times, >20 times.

(57F)

5d1) (If any item of i-m answered as yes on 5a, ask the following at the end):

Let me ask a little more about some of the disagreements that occurred in the past year). (Interviewer: List items from i-m). Had your spouse used any alcohol or any other drugs during the most recent time that this happened?

5d2) What was the drug?

5d3) How much did your spouse consume?

5d4) How long did your spouse consume it before the disagreement?

5d5) What was the nature of the disagreement after your spouse had _____(drug)? What did your spouse do?

(57G)

6a) We have just talked about the way your spouse is with you when the two of you have had a dispute or disagreement. Now I want to ask you about the way you are and what you do during these times. Tell me how often in the past year, when you and your spouse had a dispute or disagreement, you:

	<u>6a How often?</u>	<u>6b How long?</u>	<u>6c Ever?</u>
a) Discussed the issue calmly.	_____	_____	_____
b) Got information to back up your side of things.	_____	_____	_____
c) Brought in or tried to bring in someone to help settle things.	_____	_____	_____
d) Insulted or swore at your spouse.	_____	_____	_____
e) Sulked and/or refused to talk about it.	_____	_____	_____
f) Stomped out of the room or house(or yard).	_____	_____	_____
g) Cried.	_____	_____	_____
h) Did or said something to spite your spouse.	_____	_____	_____
i) Threw or smashed or hit or kicked something, but not at your spouse.	_____	_____	_____
j) Threatened to hit or throw something at your spouse.	_____	_____	_____
k) Hit or actually threw something at your spouse.	_____	_____	_____
l) Pushed, grabbed, shoved, slapped or spanked your spouse.	_____	_____	_____
m) Used a belt on your spouse.	_____	_____	_____
n) Kicked, bit, hit or beat up your spouse.	_____	_____	_____
o) Threatened to or used a knife or gun.	_____	_____	_____

(If 6a answered Once or More than once, ask 6b):

6b) How long ago was the first time you used this manner to settle things?

(If 6a answered Never, ask 6c):

6c) During a disagreement with your spouse, had you ever done the following things, and if so, when was the earliest time?

Scale of frequency:

Never, once, twice, 3-5 times, 6-10 times, 11-20 times, >20 times.

(57H)

7a1) (If any item of i-n answered as yes on 6a, ask the following at the end):

Let me ask a little more about some of the disagreements that occurred in the last year. (Interviewer: List items from i-n). Was any alcohol or other drug used during the most recent time that this occurred?

7a2) What was the drug?

7a3) How much was consumed?

7a4) How long was it consumed before the disagreement with your spouse?

7a5) What was the nature of the disagreement after you had _____(drug)? What did you do?

8) Now to a different subject. As you were growing up, were there ever occasions when your parents hit each other, or threw things at each other or used violence with each other?

(If 8 is answered yes, ask 9a-9e):

9a) For what kind of disagreements?

9b) How often did this occur?(once or twice, monthly, weekly?)

9c) What was your earliest age at which this occurred?

9d) What was your earliest age at which this occurred?

9e) Were there typical circumstances for these occasions? (probe for alcohol or other drug use)

Now I'm going to ask you about your sexual experience. (To DIS p. 63- Q. 219)

Appendix B1
Relationship of Wife Current Drinking
to Husband Aggression to Wife

Relationship of Wife Current Drinking to Husband Aggression to Wife- Pearson R's (N=30)

Aggression to Wife	Relationship of wife drinking to husband report of aggression to wife	Relationship of wife drinking to to wife report of husband aggression
Total Violence	-.02	.10 b
Reasoning	.18	-.16 b
Verbal Aggression	.02	.17
Indirect Physical Aggression/Threats	-.25	-.13
Physical Violence	-.25	-.10
Severe Physical Violence	-.14	.21

+ $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

b N= 29 for indicated correlations

Appendix B2
Relationship of Wife Current Drinking
to Wife Aggression to Husband

Relationship of Wife Current Drinking to Wife Aggression to
Husband- Pearson R's (N=30)

Aggression to Husband	Relationship of wife drinking to wife report of aggression to husband	Relationship of wife drinking to husband report of wife aggression
Total Violence	.27	.07
Reasoning	-.01	.17
Verbal Aggression	.27	.09
Indirect Physical Aggression/Threats	.06	-.11
Physical Violence	-.15	-.18
Severe Physical Violence	.12	-.18

+ $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

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