

Alcohol Consumption, Personality and Partner Abuse within a
Male Canadian Sample

by

Reena Sommer

A thesis
presented to the University of Manitoba
in fulfillment of the
thesis requirement for the degree of
Master of Science
in
Department of Family Studies

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ALCOHOL CONSUMPTION, PERSONALITY AND PARTNER ABUSE
WITHIN A MALE CANADIAN SAMPLE

BY

REENA SOMMER

A thesis submitted to the Faculty of Graduate Studies of
the University of Manitoba in partial fulfillment of the requirements
of the degree of

MASTER OF SCIENCE

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ABSTRACT

The problem of partner abuse has recently attracted much attention in the family violence literature. However, previous research investigating the prevalence of partner abuse has for the most part focused on the socio-demographic variables associated with its occurrence. Studies investigating individual differences as they relate to partner abuse have been largely confined to small clinical samples. This study tested a model of partner abuse which examined the interaction of alcohol consumption and personality in its prediction of violence between intimate partners by analysing data collected from a random sample in Winnipeg, Canada. In so doing, this study was able to examine both the demographic and psychological variables thought to be relevant in the occurrence of partner abuse. The prevalence of partner abuse among married and cohabiting males was found to be 25.5 percent. Multiple regression analyses revealed the following as significant risk factors for partner abuse: (1) positive interaction between neuroticism and alcohol consumption, (2) low social conformity (EPQL), (3) unemployment, and (4) membership in a nonwhite racial group. The results of this study lent support to a modified disinhibition theory of partner abuse. This research found that while alcohol dependence and

consumption by themselves did not sufficiently explain the occurrence of partner abuse, the interaction between alcohol consumption and personality enhanced the amount of variance explained for partner abuse.

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CHAPTER 1 - INTRODUCTION

Throughout the course of history, the family appears to have been an enduring institution. Sociological literature has shown that families have existed in all societies despite variations in their composition, patterns of residence and patterns of descent. Overtime the family has experienced changes indicated by a decline in family size and an increase in the number of women in the workforce. This ability to respond to economic and social pressures has perhaps been a measure of the family's endurance.

As a consequence, the family has been idealized, being held as a safe haven for love and security. Thus the family, a sanctified institution, has been protected from all outside intrusion. However, "...the nuclear family in which father, mother, their own biological children and no one else lived happily together has been largely a myth; families were not necessarily happy just because they live under one roof..." (p. 63, Eichler, 1987). Furthermore, the assumption that the family ensures the safety of its members is also a myth.

Pierce and Trotta (1986) suggested that families may in fact be a center of strain and conflict rather than a place of peace and tranquility. The belief that a man's home is

his castle has protected the family from outside interference (Straus, Gelles & Steinmetz, 1980) and thus the wall of privacy surrounding the family has prevented examination of these myths. Therefore, incidents of family violence have not been acknowledged and continue to go unreported.

The Study of Partner Abuse

During the past two decades, partner abuse has finally come to be recognized as a serious social problem. Early research on family violence was motivated by the desire to increase society's awareness about the issue of partner abuse and to incite people to begin questioning the acts which traditionally had been taken for granted as being "necessary, useful, inevitable and instinctive" (Steinmetz, 1977, p. 21).

Studies reflecting the incidence and prevalence of wife-to-husband abuse are limited. Nevertheless, the most recent large scale studies examining the incidence of abuse between intimate partners (Kennedy & Dutton, 1989; Straus & Gelles, 1986) suggest that approximately one in nine women are abused annually in the U.S. and Canada. Moreover, research on partner abuse to date has focused primarily on husband-to-wife abuse and has based its findings on data gathered from clinical and abuse samples. While much useful information about abused persons can be gained by studying

these samples, there is the concern that the findings cannot be generalized to the rest of the population. Furthermore, the estimates of abuse derived from these samples may be inaccurate and provide us with a false impression of both the abused and the abuser.

Data on the spouse abuser have for the most part focused on males. However, research describing the male abuser has relied upon the reports of victims of wife assault, the police or women's shelter workers. As well, studies which examine alcohol consumption and personality variables as possible risk factors for domestic violence have been limited to clinical samples. As a result, there is a general lack of population-based research examining abuse risk factors.

To date, random surveys of males examining abuse and its risk factors have not been conducted. The present study was an attempt to overcome this limitation of research by examining partner abuse and its risk factors in a random survey. Specifically, this study examined the problem of partner abuse through the perspective of the male abuser in a Winnipeg sample. By exploring the relationship between alcoholism and domestic violence as well as other associated individual risk factors, a profile of the abuser was formulated, which therefore adds to the existing knowledge base of family violence.

Male Perpetrators of Domestic Violence

Previous research on family violence has focused largely on the visible and accessible participants, the victims (Shupe & Stacey, 1987; Sonkin, Martin & Walker, 1985). For that reason, data on the perpetrators of domestic violence have come from shelter, police and social workers' reports. Self-report data on abusers have generally been lacking in family violence literature and as a result, research has been unable to provide an accurate description of the abuser, specifically in terms of the variables which would predict violent behavior. Thus the puzzle of how a man attracts a woman, abuses her over time, and then renders her reluctant and more often unable to leave the relationship, still remains unsolved.

Research suggests that while abusers are found at every societal level (Brinkerhoff & Lupri, 1988; Ontario Association of Professional Social Workers, 1987; Schulman, 1981), there are some groups of individuals found to be more vulnerable than others. In a review of the literature, Finkelhor (1983) suggested that all forms of family violence (sexual and physical abuse of wife and child) were more common in the lower socioeconomic strata, in families who were experiencing unemployment and economic deprivation, and in families who were organized in a patriarchal manner. As well, families experiencing violence were also found to be isolated, having few community ties, friendships or

organizational affiliations. These findings suggest that the feelings and experience of isolation is not limited to the female partner but also includes the entire family.

As noted, little is known about the psychological profile of the abuser. Yet there is some research that has begun to probe into the area of personality and its relationship to wife abuse. Sonkin et al. (1985) reported preliminary results of analyses of Minnesota Multiphasic Personality Inventory (M.M.P.I.) data collected from male batterers. The subjects were found to be angry and depressed, and they were also found to be experiencing related anxiety. They had problems with impulse control and chronic acting out. Some batterers were found to use denial and intellectualization as defense mechanisms, while others used hostility, withdrawal and/or substance abuse as a defence to their vulnerability. These early findings lend some support to Wodarski's (1987) description of the batterer as having a history of explosive temper and fighting, a shaky masculine self concept, overreactive to ridicule and a childhood marked by abuse and/or neglect either directed toward him or his mother.

According to the Ontario Association of Professional Social Workers (1987), the male abuser's problems with impulse control appear to be related only to his intimate relationships; he is generally able to control his behavior in relationships outside of his family (Shupe & Stacey,

1987). Furthermore, while the behavior of the abuser is not seen as an identifiable pattern of mental illness, the abusive behavior in an intimate relationship does appear to be related to an exaggerated attempt at controlling the behavior of his partner and the relationship itself. The control involves limiting the partner's interaction with others (either in person or on the telephone), monitoring her behavior in social gatherings, and deciding how she dresses and the amount of money she spends (Christensen, 1987). This form of control eventually results in the isolation (noted earlier) commonly experienced by violent families.

In a study conducted by Shields and Hanneke (1983), violent behavior was found to be associated with another set of factors. They found that husbands attributed the cause of their own violence to external sources (i.e., having a bad day, wife's nagging). This suggests that the male perpetrator does not perceive internal factors (i.e., having a bad temper) as being the source of violent behavior. Thus, in spite of overt attempts to control the behavior of others, abusive partners fail to acknowledge their own roles in causing violent episodes.

Taken together, the notion of control and attributing violence to external factors help reinforce the abused partner's belief that she is responsible for the abuser's inappropriate conduct. Understanding the personality

dynamics involved in wife abuse may be an important step toward identifying those who may be vulnerable or predisposed to abusive behavior. It would then be possible to provide the perpetrators of abuse with alternative ways of managing interpersonal conflicts in a variety of relationship contexts.

Statement of the Problem

As suggested earlier, research on partner abuse has failed to define the male perpetrator of domestic violence. Thus efforts to develop programs for both the male perpetrator and his victims have not been maximized. Specifically, this study investigated the problem of partner abuse by isolating demographic and personality variables and investigating the role that alcohol consumption plays in its occurrence. In order to address these issues, primary data were collected as part of the Winnipeg Health and Drinking Survey, and analyses were performed on part of the data. Findings of this study on male perpetrated partner abuse could aid in the development of programs for all who experience family violence.

Objectives

Using a random sample of males between the ages of 18 and 65 years in Winnipeg, Manitoba, the objectives of the study were as follows:

1. To establish the prevalence of abuse against female partners in this Canadian sample and to compare it with other Canadian and U.S. studies on female partner abuse, and
2. To establish a profile of the male partner abuser by examining the following risk factors:
 - a) the demographic features of the male partner abuser,
 - b) the relationship between alcohol consumption and partner abuse,
 - c) the relationship among personality variables and partner abuse, and
 - d) the interaction among personality variables and alcohol consumption in the prediction of partner abuse.

Defining Partner Abuse

Throughout the literature review which follows, the terms "partner abuse", "spouse abuse" and "violence" have been used to describe destructive and injurious behaviors between intimate partners. This section is an attempt at clarifying the use of these terms throughout this document.

1. The term "partner abuse" is a general term used throughout to describe behaviors between intimate partners (dating, common-law, or married) which may involve physical and/or emotional harm inflicted on one person by the other. It also refers to the intent to harm another in the absence of physical harm.
2. The term "spouse abuse" is a more specific term referring to the behaviors just described, but which involves only cohabiting couples who may or may not be legally married.
3. The term "violence" is yet a more restricted term referring to behaviors involving physical harm inflicted on one person by another. Moreover, it includes those acts in which there is a high risk of injury. Straus and Gelles (1986) referred to behaviors with the high probability of pain or injury as "severe abuse".

Partner abuse as measured in this research, was operationally defined in terms of the conflict resolving behaviors which make up the Conflict Tactics Scale, Form A (Straus, 1979). While the items chosen for this research reflect the more severe forms of abuse, the scale (as used in this study) differentiates between two modes of conflict resolution in the following way:

1. Verbal Aggression - "the use of verbal and nonverbal acts which symbolically hurt the other, or the use of threats to hurt the other" (p. 77).

2. Violence - "the use of physical force against another person as a means of resolving a conflict" (p. 77).

CHAPTER 2 - LITERATURE REVIEW

This section is a review of the spousal abuse literature and focuses on the issues examined in the research. Included is an overview of theoretical perspectives that have been used in previous research as well as a more detailed presentation of the theoretical model employed in this study.

Introduction

Prior to 1970, published academic work in the area of family violence was virtually nonexistent. The lack of research in this area is considered to be more a reflection of neglect than a denial of the existence of the problem (Pierce & Trotta, 1986). According to Chimbos (1978), the absence of research in the family violence literature finds its roots in the idealized depiction of the family "as a group wherein the individual finds love, co-operation and affectionate care." (p.1) Furthermore, the nuclear family is a culturally defined self-supporting group (Brinkerhoff & Lupri, 1988). It then follows that assistance from the outside would not be sought as it would appear to undermine the very basis of the nuclear family. According to Brinkerhoff and Lupri (1988), family privacy is double-

edged; it serves to sustain emotional involvement and intimacy, but leaves families ill-equipped to deal with problems stemming from the emotional investment. Moreover, it is the notion of privacy which differentiates family violence (spouse abuse in particular) from other forms of violence (Christensen, 1987). Because violent assaults typically occur in the home, they seldom come to the attention of the authorities by means of hospital or police reports.

The reluctance of family members to reach outside its bounds for help has also made it difficult for researchers to examine relationships within families. As a consequence, the dynamics of spousal abuse have been extremely difficult to uncover. The events which occur within the bounds of the family are not only guarded by individual family members, but also by the social workers and doctors who are entrusted with their confidence. To that extent, violence within the family has remained an invisible phenomenon (Hamilton & Collins, 1981).

Incidence and Prevalence of Spouse Abuse

The secrecy surrounding families has impeded research in the area of family violence both qualitatively and quantitatively. However, as the investigation into this area progresses, researchers have also acknowledged that family violence, and wife abuse in particular, are serious

social problems (Grossman, 1983; Straus & Gelles, 1986; Carlson, 1987; McNeely & Robertson-Simpson, 1987; Smith, 1987; Stewart, Senger, Kallen & Scheurer, 1987). This acknowledgement is due in part to the prevalence studies on family violence.

Several U.S. and Canadian studies are reviewed below. They reflect the incidence and prevalence of spousal abuse in the respective countries. While in some cases the data examine both husband-to-wife and wife-to-husband abuse, for the purpose of this study, attention was focused on the incidence and prevalence of abuse against women by their male partners. In most instances, the studies selected have utilized various forms of the Conflict Tactics Scale (CTS) (Straus, 1979). The CTS is a validated and widely used measure of the following three dimensions of interpersonal conflict: reasoning, verbal and physical aggression. A more detailed discussion of this measure will follow in a further section on methodology. Finally, these studies reflect large random samples of populations within cities, regions and in two cases, national surveys within the United States.

U.S. Data

The first national study of family violence was conducted in 1975 by Straus, Gelles and Steinmetz (1980). This study consisted of 2,143 face-to-face interviews of men and women between the ages of 18 and 65 years who were married or

cohabiting. While their study examined both husband-to-wife and wife-to-husband violence, their findings were limited to the reporting of the annual incidence of abuse rather than the prevalence rates of abuse during the history of the relationships. They found that at least 12.1% of the wives interviewed were physically attacked by their husbands at least once during the past year. As well, severe abuse was reported by 3.8% of the women (i.e., beaten with a fist, kicked, or threatened with a knife or gun).

Schulman (1981) conducted a study of wife assault using a sample of 1,793 Kentucky women. As in the previous study, these women were either married or cohabiting with a male partner at the time of the interview. It was found that 10% of the women surveyed had been abused one or more times during the past year, with 4.1% reporting severe abuse. Prevalence rates of violence were 21% and 8.7% respectively.

During the summer of 1985, Straus and Gelles (1986) replicated their 1980 study. Again using a national sample, they conducted 3,520 telephone interviews employing the CTS to collect data on spouse abuse. This study indicated an annual incidence rate of husband-to-wife abuse of 11.3% with severe abuse at 3%. These rates were somewhat lower than those reported in their earlier study. Straus and Gelles (1986) suggested that the reduction in abuse rates may have been due to methodological differences, increased awareness of family violence issues and thus a reluctance to report

its occurrence, as well as an actual decline in abuse due to prevention and treatment efforts.

Canadian Data

Canadian researchers have failed to produce any national surveys on family violence. The data collected on partner abuse have been limited to samples of large Canadian cities and a regional study of wife assault conducted in the Province of Alberta (Kennedy & Dutton, 1989). The most widely cited estimate of wife abuse in Canada (10%) was that reported by Macleod (1989). However, her data were gathered from female residents of seven transition homes and emergency shelters and from women who filed for divorce on the grounds of physical cruelty, not from a probability sample. Her estimate of wife abuse therefore does not represent a reliable incidence rate of wife abuse in Canada.

The first large random survey of wife abuse in a Canadian city was conducted during 1981 in Calgary by Brinkerhoff and Lupri (1988). At the time of their data collection, the crude divorce rate in Calgary was 554.54/1,000 or twice the national average of 278.00/1,000. For that reason, it was felt that Calgary would represent an excellent research locale for the study of domestic violence. However, the sample consisted of 562 married or cohabiting couples and did not include divorced or separated couples originally thought to be more likely victims or perpetrators of spousal

abuse. In this study, the CTS was administered in the form of a self-report questionnaire in an effort to reduce the impact of the presence of a stranger interviewer. This study provided alarming high annual rates of mutual violence (37.8%) and overall wife-to-husband violence (13.2%). However, the annual rate of overall husband-to-wife abuse (10.3%) was more in line with other previous studies. On the other hand, severe husband-to-wife abuse (as measured by the CTS) when compared to other Canadian abuse studies was found to be higher (4.8%) in this Calgary sample.

During the early part of 1987, Smith (1987) conducted a telephone survey of 604 currently or formerly married or cohabiting Toronto women between the ages of 18 and 50 years. The findings reported yet the highest annual rate of woman abuse (14.4%) and severe woman abuse (5.1%). More astounding were the prevalence rates of abuse. Using three supplementary questions on violence, the prevalence rate (i.e., partner abuse occurring during one's lifetime) of woman abuse was found to be 36.4% while severe woman abuse was 11.3%.

Kennedy and Dutton (1989) conducted the first regional study of wife assault in Canada. During 1987 data were collected from a random sample of Edmonton residents (18 years and older) in face-to-face interviews, while data were also gathered from a random sample of Calgary and rural Alberta residents (18 years and older) in telephone

interviews. The sample included individuals who were single, married, living in common-law relationships, divorced or separated. They found that the overall husband-to-wife violence rates were comparable to those found in the 1985 U.S. national survey (Straus & Gelles, 1986) at 11.2% and 11.3% respectively. However, severe violence rates were found to be less in this Alberta sample (2.3%) compared to Straus and Gelles' (1986) findings (3.0%). Consistent with Schulman (1979), rates of violence were found to be higher in urban areas (Edmonton, 14.1%) compared to rural areas (populations under 1,000, 8.3%). The highest incidences of wife assault were reported by those who were separated or divorced and young (between 18 and 34 years of age).

Summary

On the whole Canadian statistics on wife abuse appear to be higher than those indicated by U.S. data. However, these differences must be interpreted with caution. With the exception of the Alberta regional study of wife assault (Kennedy & Dutton, 1989) which demonstrated overall husband-to-wife violence rates comparable to those of Straus and Gelles (1986), the other Canadian studies reflect data gathered in large city samples. Comparing the rates of violence in large cities with rates of violence in national surveys may be inappropriate since husband-to-wife violence has been shown to be higher in urban areas (Kennedy & Dutton, 1989; Schulman, 1981).

Second, although the CTS was used as a measure of violence in all the above studies, there were differences in how it was administered (i.e., face-to-face v.s. telephone interview). Furthermore, Smith (1987) added three supplementary questions designed to jog the memories of the subjects in recalling incidents of violence. These additional items may account for the higher rates of violence found.

Finally, the age range of the participants surveyed varied between studies. Since violence was found to be negatively correlated with age (Brinkerhoff & Lupri, 1988), those studies surveying younger subjects would be expected to have higher rates of violence than those surveys which included participants 65 years and older. A more detailed discussion of family violence methodology will be covered in a further section.

Predictors of Violence against Women

The following section examines factors associated with wife abuse. These factors have found support in the literature and guided the development of the hypotheses tested in this study. The discussion will focus on the demographic variables which will define the abuser, as well as personality variables and alcohol consumption which will form the basis of the "abuser" profile.

Demographics

The prevalence studies described in the previous section and other studies yet to be reviewed provide information that goes beyond the reporting of how many and how often people are abused. They provide information on the age, education, income, and occupation of those in the sample and often similar information about the perpetrator of abuse.

Age. As noted earlier, most information about the abuser comes from the victim's reports and thus are only reflective of the victim's perceptions surrounding the event. Nevertheless, the information gathered from the victims together with the findings from the limited reports of the perpetrator provide some idea as to the identifying age group most at risk for spousal violence. Stacey and Shupe (1983) examined the detailed histories of 542 women who sought assistance in two women's shelters in Dallas, Texas during January, 1980 and March, 1982. According to the information gathered from these women, the mean age of the partners who had assaulted them was 33 years. However, in a follow-up study, Shupe and Stacey (1987) compared these data with data collected from male batterers participating in three rehabilitative programs in the State of Texas and found that the participants in the abuse programs were slightly younger (29 years).

In the survey of spousal violence among Kentucky women (Schulman, 1981), only the age range of the victims were reported. Therefore, if one was to operate under the assumption that women tend to form relationships with men of similar ages, then the finding that the greatest incidence of violence occurred among those women 18 to 29 years would suggest that their abusive partners would fall into a similar age range. Likewise, in the study conducted by Macleod (1987), 70% of the women who stayed in transition houses to escape from their violent partners were under 34 years of age, suggesting also that their partners might be in a similar age range.

The findings of Brinkerhoff and Lupri (1988) provide a somewhat different assessment of age as a risk factor in their Calgary sample. Whereas mutual abuse was most likely in the less than 30 years age range, violence against a female partner was most common in the 30-45 year age range. Yet, in the Alberta study on wife assault (which included a Calgary sample), Kennedy and Dutton (1989) found that male spouse abusers were commonly between the ages of 18-34 years of age. Perhaps the finding that the 30-45 year old age group were more at risk for abuse in the Calgary sample (Brinkerhoff & Lupri, 1988) can be explained by the collapse of the Calgary economy placing particular stress upon this middle aged group at the time of data collection.

The studies reviewed suggest that the male perpetrator of domestic abuse is young, in most cases under the age of 35 years. Roberts (1987) suggested that a factor contributing to the low number of reported cases in older age groups may be that women of that age have resigned themselves to the abuse and therefore do not contact the authorities when violence occurs.

Education. One would expect that those with limited education would be poorly prepared to face life's challenges. It also follows that the skills necessary to find a job as well as those necessary for interacting with others may be deficient among individuals with limited education. Furthermore, opportunities for career advancement are less than optimal for those without a high school diploma. Lack of skills and lack of opportunity combined with resulting lower incomes and stress may place an individual at risk for spousal abuse, but the literature provides inconsistent and weak support for this rationale.

While Macleod's (1987) study found that 61% of the batterers had not completed high school, other studies do not provide as clear a picture of the relationship between education and abuse. For example, Brinkerhoff and Lupri (1988) found that husbands' education correlated (although not significantly) with all forms of spousal abuse (husband-to-wife, wife-to-husband and mutual); those with high school education or less were more violent than those with some

university. However, Schulman (1981) also found that while violence was most common among men with some high school education (48%), violence was less common among men with grade eight education or less. Steinmetz (1977) likewise found that the most abusive husbands were those with a high school diploma.

The research conducted by Stacey and Shupe (1983) and Shupe and Stacey (1987) provide the most conflicting results. In their earlier study, Stacey and Shupe (1983) found that abuse was most common among men with high school and some college education (52%). In their follow-up study surveying battered men, Shupe and Stacey (1987) found that 80% of the men had high school education or better. Furthermore, men who entered the program voluntarily had higher education compared to those whose participation was court ordered.

The findings suggest a complex relationship between education and family violence. Steinmetz (1977) suggested that this relationship could be explained in terms of a person's relative rather than absolute educational attainment. In other words, it may be more stressful for a person to have some education than none. An individual with a high school education may have expectations of higher achievement which may be blocked by limited financial resources, whereas an individual with minimal education does not have the ability nor the expectations to achieve higher

goals. The individual with unfulfilled goals may experience frustrations which may result in violent behavior.

One also might expect that such conflicting findings regarding education as a possible risk factor for abuse may be a function of the interactive effects of other variables. Factors related to methodology may explain the inconsistent findings. For example, since none of the studies represent a national study, perhaps the differences found in education may be reflective of regional variations. Differences may also be accounted for when one considers the sources from which data are gathered. It may be inappropriate to make direct comparisons between reports on abusers gathered from victims of abuse and self reports of male batterers.

Income. The research on the relationship between income and domestic abuse provides more consistent findings than for the other predictor variables discussed. Brinkerhoff and Lupri (1988) found that income was negatively and significantly correlated with all forms of abuse. Their finding was supported by Macleod (1987) who found that during 1985, women in transition homes and shelters had a total annual family income of less than \$10,000 (43%) and \$10,000 to \$20,000 (32%). Similarly, Kennedy and Dutton (1989) found that 55% of husband-to-wife abuse occurred among couples who had a total annual income of less than \$6,000.

Research conducted in the U.S. has provided similar results. Schulman (1981) found that abuse was the greatest among women with total annual family incomes of less than \$15,000. In their first study, Stacey and Shupe (1983) reported that 69% of abused women had total annual incomes of less than \$15,000, while they reported 43% of the sample had a total annual family income of \$10,000 to \$20,000 in their follow-up study (Shupe & Stacey, 1987). Similarly, Steinmetz (1977) found that families with an annual income of less than \$5,999 experienced a rate of violence between husbands and wives 500% greater than families with an annual income greater than \$20,000.

These studies clearly indicate that families experiencing spousal abuse are at the poverty level. The lack of adequate income may place a strain on those who are trying to provide one's family with basic necessities. The challenge of trying to "make ends meet" with limited financial resources may make violent behavior appear to be a viable mode of conduct.

Occupation. As with income, the research on occupation and its relationship to spousal abuse is rather consistent. Macleod (1987) provided the only detailed accounting of the violent family's occupational status in a Canadian sample. She found that 38% of the abusive partners were regularly employed. Of those who were employed regularly, 59% were unskilled blue collar workers. The remainder was

distributed as follows: 27% had skilled blue collar jobs, 10% had white collar jobs, and only 4% were professionals. Steinmetz (1977) and Schulman (1981) likewise found that violent behavior among male partners was more common among blue collar workers than those engaged in professional or managerial white collar occupations. The studies conducted by Stacey and Stacey (cited in Shupe & Stacey, 1987) and Shupe and Stacey (1987) provided very similar results along this dimension; 51% and 58.5% respectively were blue collar workers.

Kantor and Straus (1987) examined the relationship among spouse abuse, occupational status and alcohol consumption in a national survey of 5,159 U.S. households of currently married or cohabiting couples. They found that blue collar workers (13.4%) abused their partners significantly ($p < .004$) more often than white collar workers (10.4%). Moreover, the tolerance of wife abuse was found to be more prevalent among blue collar workers (18.5%) than white collar workers (14.4%).

The findings presented suggest that low occupational status (i.e., blue collar workers) and spousal violence are related. There is reason to place some degree of confidence in these findings since the relationship between occupation and abuse has been demonstrated among clinical samples as well as regional and national random samples.

Ethnicity. There has only been limited research examining the relationship between ethnicity and family violence. Data collected in the U.S. have focused primarily on comparing rates of family violence among the white, black and Hispanic people (Schulman, 1981; Straus et al., 1979). Findings indicated that rates of partner abuse were higher among nonwhite women (23%) compared to white women (9%) (Schulman, 1981). Researchers have failed to provide reliable data testing the relationship between ethnicity and abuse in Canadian samples. Nevertheless, ethnicity is an important variable and certainly warrants further investigation as a possible risk factor for abuse in both the U.S. and Canada.

Summary. Although family violence has been found to cut across all segments of society (Ontario Association of Professional Social Workers, 1987; Schulman, 1981), the research findings provide the following picture of an individual at risk for spousal violence: a nonwhite male who is young, has achieved high school education, has a low income and is a blue collar worker. The demographic profile derived from the literature suggests that family violence is most likely to occur among males from lower socio-economic status (SES).

According to Steinmetz (1977), this characterization of the abuser is consistent with previous research on child and wife abuse conducted during the 1960's and the early 1970's

(relying upon data from police and medical reports) which suggested that family violence was a problem of the lower class. While it may be true that low SES families lack the resources necessary to assist them in dealing with life's stresses making them more vulnerable to the use of violence as a means of conflict resolution, one should also be aware that they lack as well the resources which insulate them from prosecution for abusive behavior (Steinmetz, 1977; Straus et al., 1980). For example, the lower class family is restricted by limited forms of medical or legal assistance available whereas middle and upper class families may avail themselves of private physicians and lawyers.

Furthermore, Stewart et al. (1987) found that while physical violence toward wives occurred in 6% of the middle class families surveyed, the most common form of abuse used by this group was mutual emotional neglect (18%). Perhaps violent behavior occurs just as often among middle and upper class families. However, since they have access to resources not available to the lower class and present themselves with a form of abuse which differs greatly from that of the lower class, the middle and upper class families are able to escape being reported or prosecuted. Research which identifies abuse in large random samples may help resolve the issue of whether abuse is really a lower class problem.

Personality

Epidemiological studies on family violence and spouse abuse in particular have not examined psychological risk factors for abuse. The limited research on psychological variables is derived from clinical studies of wife batterers; however, these results cannot be extended to the general population. Nevertheless, these clinical studies form the only knowledge base on which profiles of spouse abusers have been built.

A question which arises when examining the issue of family violence is whether the abuser is psychologically different from the rest of the population. Research suggests that the abuser is indeed different. According to Hamberger and Hastings (1986) psychopathology can be demonstrated among spouse abusers. In a replication study by the same authors, they found among a sample of 99 men who attended a domestic violence abatement program that 88% showed some indication of pathology. The measures used in that study to assess pathology were (a) the Millon Clinical Multitaxial Inventory (MCMI), (b) Novaco Anger Scale, and (c) the Beck Depression Scale. The results showed that no single profile of abuser emerged; rather there were eight distinct personality profiles derived from the following three major personality categories: (1) schizoid/borderline personality disorder, (2) narcissistic/antisocial personality disorder and (3) passive dependent/compulsive personality disorder.

Kalichman (1988) investigated the psychological characteristics of men and women convicted of domestic homicide. Using MMPI scales as a personality measure, results indicated that the most common profile in men who had committed domestic murder was a single elevation on the scale Pd (35%). An elevation in this scale is indicative of sociopathy, a personality dimension characterized by pathological lying, chronic difficulty with the law, failure to maintain long-term relationships and a general disregard for societal norms. Similarly, Schuerger and Reigle (1988) analyzed personality and background data from 250 men enrolled in a treatment program for abusive behavior. Their findings supported those previously cited. The abusers demonstrated schizoid or neurotic behavior patterns, and a significant proportion of them were antisocial and alcoholic. Finally, in an earlier paper (Barnes, Greenwood & Sommer, 1989), we examined the prevalence of courtship violence among college males. Findings indicated that certain personality dimensions (neuroticism and extroversion) were risk factors for abuse. Furthermore, the interaction of these personality dimensions with alcohol consumption increased the amount of variance explained for physical violence.

The family violence literature also suggests that men who abuse their partners suffer from low self-esteem, as indicated by reports of abused women (Gondolf, 1985; Levine,

1986; Macleod, 1987; Roy, 1977; Straus et al., 1980; Wodarski, 1987). Goldstein and Rosenbaum (1985) and Rouse (1988) administered Rosenberg's (1965) measure of self-esteem to samples of abusive husbands. The findings of these two studies were inconsistent. Low self-esteem was significantly related to abusive behavior (Goldstein & Rosenbaum, 1985), but Rouse (1988) found low self-esteem was not significantly related to the use of abusive tactics between spouses. It was instead related to being abused as a child and having witnessed spousal abuse in parents. In another study, Johnston (1988) used the Tennessee Self-Concept Scale (cited in Johnston, 1988) as a measure of self-esteem and found some support for Rouse's (1988) findings that self-esteem interacted with abuse as a child in its relationship to spouse abuse.

While there is clearly a lack of research in the area of psychological variables associated with spouse abuse, the studies reviewed indicate that the male abuser differs from the rest of the population on various personality dimensions. Compared to general samples, abusers demonstrated measureable levels of pathology as determined by a variety of instruments: MMPI (Kalichman, 1988; Sonkin et al., 1985) 16PF, PSI, SN, MAST (Scheurger & Reigle, 1988) and EPQ-R (Barnes, Greenwood & Sommer, 1989). This is not to say that all abusers manifest psychological pathology. For example, Hamberger and Hasting (1986) found that 12% of

their sample showed no discernable pathology. Nevertheless, there have been differing profiles of partner abusers developed (Dutton, 1988) depending on the research strategies employed. In spite of attempts to identify the abuser psychologically, researchers are still puzzled by the range of pathology existing in this population.

Alcohol Consumption

The consumption of alcohol and its relationship to violence is not limited to incidents of family violence; rather it has been associated with many forms of violent behavior ranging from common assault (Gerson, 1978) to homicide (Chimbos, 1978). According to Shapiro (1982) alcoholics are more aggressive and impulsive, and they score higher on measures of hostility than nonalcoholics. Therefore, it is not surprising that alcohol is implicated in family violence when extreme physical abuse is suffered by women whose partners are chronic drinkers.

In a review of family violence literature, estimates of the presence of alcohol in domestic assaults ranged from 40% to 90% (Hauser, 1982). Research also indicated that violent acts committed while under the influence of alcohol result in more serious physical injuries to the victim (Carlson, 1987) and show greater neighborhood disturbances and more calls to the police (Christensen, 1987). While alcohol appears to be a significant factor in violent families

(Carlson, 1987; Christensen, 1987; Gerson, 1978; Grossman, 1983; Hauser, 1982; Kantor & Straus, 1987; Lindquist, 1986; Spielberger, 1970; Wodarski, 1987), the exact nature of the role of alcohol consumption in domestic violence is still unclear. In order to address the issue of alcohol consumption and its relationship to spousal violence, the following issues have been identified as contributing to its lack of clarity:

1. There is an imperfect relationship existing between violence and alcohol consumption whereby violent behavior may occur in the absence of alcohol, and alcohol intoxication may occur without violence.
2. Alcohol consumption is seen as an excuse for violent behavior.
3. There is an absence of alcohol consumption prior to or during a violent episode.
4. The spouse of an alcoholic is involved as a coalcoholic or codependent.
5. There may be other variables which link violent behavior and alcohol consumption.

The Imperfect Relationship. The literature provides support for alcohol consumption predicting the likelihood of spouse abuse, but this relationship is not perfect. For example, while there are many perpetrators of abuse who do not drink, there are also many alcoholics who are not

violent. The belief in the absolute relationship between alcohol and violence has its roots in the idea that alcohol is destructive and evil, and therefore destruction and evil are likely to be found wherever there is alcohol. This logic forms the basis of the "malevolence assumption", an implicit attitude underlying much of family violence literature.

The literature suggests that violent alcoholics are not a homogenous group and that identifiable differences exist. In reviewing the case histories of nine women who were involved in an abusive relationship where alcohol was a factor, Russell (1982) distinguished between men whose drinking and violence were symptomatic of poor impulse control and whose violence would likely not stop when drinking ceased, and those men for whom the cessation of drinking would likely decrease or end their violent behavior. The research clearly supported the notion that alcohol consumption and its consequences are not simple.

Frieze and Schafer (1984) conducted a factor analysis of questionnaire items relating to alcohol consumption and violence and found that five factors emerged and accounted for 51% of the variance. Each factor was interpreted as representing a marital style based on alcohol consumption and violent behavior patterns. The following are three factors which relate specifically to husband-to-wife abuse with alcohol as the only substance implicated in the violent behavior:

1. Alcohol was seen as a problem to both husband and wife. The husband was a heavy drinker, violence was always associated with being intoxicated and arguments over drinking often start fights.
2. The couple fought while drinking but were neither excessive drinkers nor overly violent with each other.
3. There was a high level of family violence (abusive to wife and children) including reciprocal violence and sexual violence toward wife. However, drinking was not seen as a problem to either husband or wife (Frieze & Schafer, 1984).

Research has found that alcohol has some predictable physiological and cognitive effects including skin flushing, increased heart rate, decreased ability to feel pain, memory loss and reduced reaction time (Frieze & Schafer, 1984). Nevertheless, in spite of these predictable effects, there are others which are less predictable. These include alcohol's effect on violent behavior. Frieze and Schafer (1984) found that violent behavior among both men and women depended upon the social context in which drinking occurs and the prior expectations of the person about how alcohol will effect him or her. For example, a man who has a "macho" image might expect alcohol to enhance his feelings of power. Given those feelings, he might react with violent behavior if he finds himself in a situation where he is admonished for drinking by his partner.

Hamilton and Collins (1981) reviewed the literature on family violence and alcohol consumption and found that the association between the rates of violence and alcohol consumption appeared to be curvilinear. The lowest rates of violence were found among those who drank the least, whereas the highest rates of violence were found among moderate to heavy drinkers. The heaviest drinkers had higher abuse rates than infrequent drinkers or abstainers, but lower rates than the moderate to heavy drinkers. While they were unclear as to whether the nature of these findings was a function of dosage level or chronicity of the drinking problem, Russell (1982) addressed this issue in terms of the paradoxical effects of alcohol on some men. He explained that in some men alcohol consumption appears to undermine their capacity to become violent whereas in other men, it augments their violent behavior.

While the research reviewed suggests that excessive drinking is associated with higher partner abuse rates, alcohol consumption is neither a necessary or sufficient cause of wife abuse (Kantor & Straus, 1987).

Alcohol as an Excuse. Wodarski (1987) explained the role of alcohol consumption in family violence in terms of the disease model. Accordingly, when alcoholism is viewed from the perspective of an illness, the alcoholic is absolved of responsibility for his actions while intoxicated by family members as well as by society. Researchers have suggested

that violence combined with alcohol makes the violence more acceptable and that the alcohol consumption provides an excuse for the behavior (Freeman, 1979; Frieze & Schafer, 1984; Hauser, 1982; Lundquist, 1986). Thus any behavior including incidents of family violence is excused by the abuser as well as the abused.

The use of the disease model implies that there should be a chemical cure for a drinking problem, and thus it explains in part the reason for the alcoholic's resistance to therapy (Shapiro, 1982). As a consequence, treating families who experience both alcoholism and violence is a difficult task. Therapists have to teach their patients to accept responsibility for their drinking problems as well as their violent behavior. On one hand, partners of alcoholic men will make excuses for violent behavior by attesting to the fact that when the men are not drinking, they are never violent (Russell, 1982). On the other hand, families will often present themselves for alcohol abuse therapy and fail to even mention family violence as a problem (Lindquist, 1986; Wodarski, 1987). By not openly acknowledging the existence of abuse in the relationship, the behavior is deemed as acceptable within the context of the alcoholism. In either case, violent behavior by the alcoholic is overtly or covertly excused.

Hamilton and Collins (1981) and Hauser (1982) explained that alcohol consumption acts as a mechanism for disavowing

deviant behavior in a family member. When one family member is violent, thus acting in a deviant manner, it is convenient to project the blame for the deviant behavior onto the effects of alcohol. In so doing, the family's image of normalcy or nondeviance is maintained.

Other researchers (Frieze & Schafer, 1984; Livingston, 1986; Richardson & Campbell, 1980; Russell, 1982) have used the term "time out" to refer to men getting drunk so that they can behave violently. For many people alcohol intoxication provides a seemingly legitimate excuse for inappropriate conduct; therefore, assaulting another person while under the influence of alcohol is a relatively acceptable way of relieving pent up frustrations. Support for the notion that violent behavior is excused or discounted was demonstrated by Richardson and Campbell (1980) who conducted a study which focused on attributions of blame onto the wife and its relationship to alcohol consumption. As predicted, they found that when the husband was drunk, situational factors received more blame. This finding suggests that alcohol is an effective external factor such that the "alcohol made him do it".

Timing of Drinking Relative to Violence. The relationship of the timing of drinking to the violent episode is unclear. While the research reviewed suggests that alcohol consumption is associated with family violence, drinking at the time of the incident may not be the main

correlate (Lindquist, 1986). Rather, the high correlations noted in the literature may actually relate to the male's current level of alcohol abuse. It may be the alcoholic lifestyle that is a more important predictor of violence than the actual presence of intoxication at the time of the assault. Support for this notion was demonstrated by Leonard, Bromet, Parkinson, Day and Ryan (1985) who examined the relationship between alcohol use and alcoholism and physical marital conflict in a sample of blue collar workers. Their findings suggested that the pattern of alcohol consumption and not the total amount of alcohol consumed was a critical factor in physical abuse. Similarly, Kantor and Straus (1987) found that while there was a strong linear relationship between drinking and wife abuse, alcohol was not consumed immediately prior to the conflict in 76% of the cases.

A possible explanation for these findings may lie in the long term effects of chronic alcohol consumption. According to Hamilton and Collins (1981) chronic drinking has the potential to change the consumer. The physiological and cognitive effects of alcohol affect the behavior of the individual and shape personal interactions through its influences. The cognitive distortions caused by the consumption of alcohol lead to a redefinition of situational norms and have an impact on the interactions between people. As a consequence, there is a greater likelihood that violence will occur.

Women as Coalcoholics. Lindquist (1986) used term "coalcoholic" to refer to anyone in a dyadic relationship with an alcoholic be it a spouse, parent, friend or lover. In the most general terms it refers to the individual who assumes the responsibilities of the relationship as the alcoholic becomes increasingly impaired. The coalcoholic suffers the consequences of assuming the role. By excusing the conduct of the alcoholic and accepting responsibility for his conduct, the coalcoholic contributes to and helps maintain the alcoholism (Lindquist, 1986).

For many women who are in a relationship with an alcoholic man, one of the consequences of their involvement may be exposure to incidents of violence. Life for a battered coalcoholic is doubly problematic; not only must she cope with the problems associated with alcoholism, but also she must cope with physical abuse. According to Lindquist (1986) the coalcoholic tends to deny both sets of problems. When in therapy, women coalcoholics fail to recognize their violent partner's excessive drinking as alcoholism. Moreover, they also fail to acknowledge that the drinking contributes to the violence problems.

Research conducted by Hanks and Rosenbaum (1977) demonstrated that battered women living with alcoholic men carried with them the conditions of childhood; the tendency to be involved with violent men who drink was a part of the women's psychic economy. Furthermore, the women involved in

the study had no insight into how the marital roles they modeled or the specific roles they played in their families of origin had an impact on their present relationship. Inasmuch as they despised the alcoholism and physical violence in their family of origin, they appeared to have little appreciation for the extent to which they were currently participating in that very behavior.

Other Variables linking Alcohol Consumption to Violence.

The literature suggests that the association between alcohol consumption and family violence may occur through the effects of other variables (Hamilton & Collins, 1981). There is some indication that certain groups in society may be more at risk for abuse than others. The research consistently points to members of low SES as being particularly vulnerable. Kantor and Straus' (1987) findings lend support to the effects of occupational status on wife assault. They found that the combination of blue collar occupational status, drinking and approval of violence was associated with the highest likelihood of wife abuse. Alternatively, Roy (1977) found that the correlations between alcoholism and violence were higher for families who had been together for more than seven years when compared to families with a shorter relationship. The length of the relationship as a risk factor for abuse would suggest that the progressive nature of alcoholism gradually intrudes upon the interaction within the family.

Still other researchers have uncovered a number of other variables found to link drinking and family violence. Gustafson (1985) investigated aggression as it interacted with alcohol and frustration. He found that increases in aggression were observed only in the frustrative condition for intoxicated subjects. In another experimentally designed study examining alcohol's effects on aggressive and nonaggressive responding, Kelly, Cherek and Steinberg (1989) found that alcohol increased aggressive responses following provocation while having little effect on or decreasing nonaggressive responses at the same doses. The results of this study suggest that alcohol's effect on aggressive behavior cannot be completely understood without taking into account the reinforcement contingencies operative in the individual's environment. In support of these findings, Hamilton and Collins (1981) suggested that the consumption of alcohol may cause distortions in understanding other behaviors and ability to cope with stressful situations. These distortions and inability to interpret others' intentions or behaviors seem to be critical in the escalation process of violence. In other words, drinking acts as a catalyst for violence via its effects on cognition.

Summary. The literature reviewed in this section highlights the issues seen as impeding the formation of a direct link between alcohol consumption and family violence.

At the most fundamental level, anger and hostility are generated by the interaction between people, not by the intake of alcohol (Shapiro, 1982). Regardless of its relationship, research indicates higher rates of abuse among alcoholics compared to the rest of the population. While researchers struggle to find a direct causal link (Russell, 1984), Gondolf (1985) suggested that alcohol appears to reinforce family violence rather than causing it.

Theoretical Perspectives

Violence between partners is complex in that the dynamics underlying abuse are multifaceted. As a consequence, the existing theories are limited to a partial understanding of family violence. The problem of family violence and spouse abuse in particular has been studied from the following theoretical perspectives: (a) psychoanalytic (Gondolf, 1985), (b) family systems (Bograd, 1984; Emery, 1989; Gelles & Maynard, 1987; Wodarski, 1987), (c) social learning (Gondolf, 1985; Kalmuss, 1984), (d) conflict (Brinkerhoff & Lupri, 1988; Straus, 1979) and (e) disinhibition (Hamilton & Collins, 1981; Kantor & Straus, 1987; Spielberger, 1970).

Overview

Studies that employ the psychoanalytic theory of spouse abuse focus on the intrapsychic forces within the individual. Violence against women is seen as an attempt on

the part of the male abuser to confirm his masculine identity (Gondolf, 1985). By hating women the abuser is able to contain and control the feminine aspects of his upbringing. As with other research using psychoanalytic theory, its hypotheses are difficult to test, and at best its value lies in post hoc explanations of a phenomenon.

Family systems theory views families as open systems in which the actions of one member has an effect on others. This theory is useful in explaining the reactions of children who may not be direct recipients of physical abuse, but through their family membership suffer its consequences. It also explains the disavowing of an alcoholic partner's violent behavior. Furthermore, because the violence and alcohol abuse serve the function of maintaining stability within the family, its resistance to therapy can also be explained by this theory (Wodarski, 1987).

Proponents of social learning theory explain the transmission of family violence from one generation to another (Kalmuss, 1984). The family as a primary socializing agent teaches young family members values and rules of conduct. In that way family members serve as role models for its members. As a consequence, when violent behavior is modeled by adult family members, violence is perceived as normative and is considered to be an appropriate mode of conflict resolution. While individuals have the opportunity to learn violent behavior from sources

such as the media, the family (being the primary reinforcer) has the greatest impact on its members. Nevertheless, social learning theory is useful in explaining the development and occurrence of violence through a variety of learning models.

According to conflict theorists, conflict within a relationship is a necessary condition to ensure its proper functioning. Families are a perfect source of conflict due to the close bonds of its members and the high frequency of interaction between them (Brinkerhoff & Lupri, 1988). Without the changes brought about by conflict, families run a high risk of collapse (Straus, 1979). In presenting the rationale behind the CTS, Straus (1979) distinguished among methods or "tactics" of conflict resolution. Furthermore, he stated that the critical issue was not so much the existence or amount of conflict, rather the methods in which conflicts were resolved. Similarly, this theory is also limited by its failure to explain incidents of abuse not directly precipitated by conflict but rather indirectly by an alcoholic binge.

The Disinhibition Theory

The high rates of alcohol consumption associated with family violence make the disinhibition theory an appropriate theoretical perspective by which to study partner abuse. According to this theory, alcohol consumption is linked to

violent behavior through its physiological effects releasing an individual's violent impulses, tendencies and inhibitions (Hamilton & Collins, 1981; Spielberger, 1970). More specifically Kantor and Straus (1987) explained that "alcohol's effects on the central nervous system release inhibitions by depressing brain function or suppressing super-ego function thereby allowing the expression of rage" (p. 214). In addition to the physiological and cognitive effects of alcohol on the individual, personal vulnerability (Barnes, Greenwood & Sommer, 1989) and the context in which interaction occurs (Shapiro, 1982) play a role in determining the likelihood of violent behavior. Thus under the influence of alcohol, behavior which normally is kept in check is unleashed, and the individual's risk for abuse is increased. While this theory explains individual risk factors associated with partner abuse, it does not offer a complete explanation. Factors related to the social origins of abuse are not addressed by this theory.

Rationale

A modified disinhibition theory was proposed in this study to explain the interaction between alcohol consumption and personality in the prediction of partner abuse. This theory was considered relevant to the present study for the following reasons: First, it takes into account the imperfections in the relationship between family violence

and alcohol consumption. It assumes that one must be predisposed to or at risk for abuse in order for violent tendencies to be released. It is supported by Gustufson's (1985) finding that frustration was a predisposing condition to aggression in intoxicated males and that without the element of frustration, no increase in aggression was observed. One could expect that for those individuals who have low frustration levels, abuse would be more likely under the influence of alcohol than for individuals with a high tolerance for frustration. This line of reasoning helps explain the interaction of other variables linking drinking and family violence and why alcohol releases violent behavior in some people and not in others.

Second, the complex relationship between the amount of alcohol consumed and violent behavior may be explained in terms of the degree of alcohol concentration in the body required to produce the disinhibition of rage. This follows a suggestion made by Russell (1982) which addressed the paradoxical effects of alcohol on the individual: for some persons alcohol consumption impedes violent behavior while for others it increases it. Alcohol's differential effects on its consumer may be related to several factors, one of which is the amount ingested. It would appear that those individuals who are less violent under the influence of alcohol have a greater sensitivity to its depressive effects (American Psychiatric Association, 1987) than those who

behave more violently. Thus for those individuals at risk for violent behavior, the consumption of large amounts of alcohol may increase the likelihood for partner abuse.

Finally and somewhat related to the previous point, modified disinhibition theory may also explain why drinking prior to or during a violent incident was not found to be the critical variable. As Hamilton and Collins (1981) noted, over time alcohol consumption alters the cognitive set of the alcoholic, making him more vulnerable to misinterpretations of other's behaviors and motives. Thus, alcohol through its effects on cognitions appears to be relevant in the escalation process of violence. Figure 1 illustrates the model of partner abuse tested in this research.

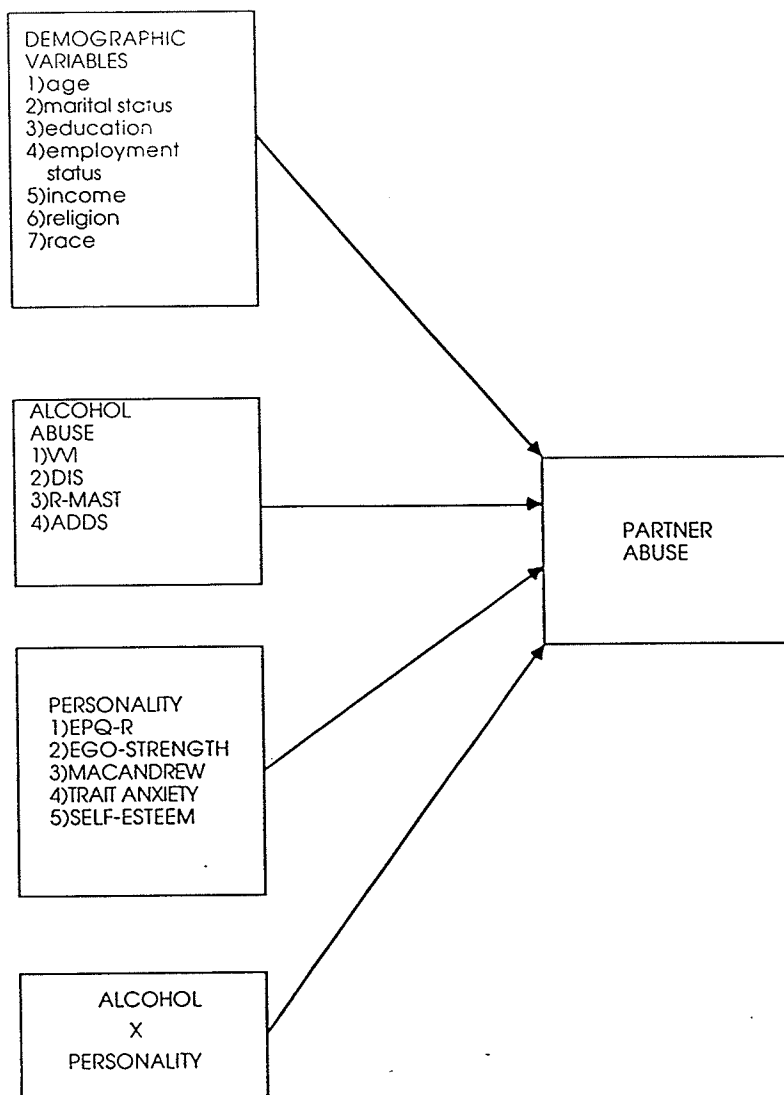


Figure 1: Model of Partner Abuse

Limitations of the Research

The study of family violence is a complicated process not only because of the relationships among variables but also because of several limitations which curtail its investigation. The limitations of research in the area of family violence fall into the following three categories: (1) definitions, (2) sampling, and (3) methodology.

Definitions

The literature is unclear as to its definitions of alcohol consumption and physical abuse within a family context. Generally, partner abuse has been defined as any act which has a high potential for injuring the person being assaulted (Steinmetz, 1977). Nevertheless, researchers have used the same term to refer to behaviors ranging from threats of violence to instances in which severe injuries are inflicted upon the victim of an assault (Straus et al., 1980). Although still criticized on methodological grounds, the CTS (Straus, 1979) has overcome some of the problems associated with defining violence within the context of intrafamilial conflict resolution. Because of its demonstrated validity (Kennedy & Dutton, 1989), this scale is widely used in studies which examine prevalence rates of family violence.

Similarly, the definition of alcohol consumption also lacks precision. Studies have failed to distinguish between pathological and periodic drinking (Downey & Howell, 1976). Making distinctions among the types of drinking through the use of multiple drinking measures may result in a clear understanding of the relationship between alcohol and family violence.

Sampling

The second category of limitations found in this area of study involves the sampling techniques of researchers. The research examining the problem of violence between intimate partners involves data which are typically derived from small samples of treatment populations, such as: (1) women's shelters, (2) families in the process of divorce, and (3) drug and alcohol treatment groups. Findings from these samples cannot be generalized to the general population. Furthermore, reports about the abusive behavior of men came from their abused partners (Gondolf, 1985) and provided a biased and perhaps inaccurate assessment of the abuser. Finally, assessing the involvement of alcohol in partner abuse is made more difficult by the multiple sources from which data have been collected such as: (1) self report of husbands and wives, (2) clinicians' data, and (3) police reports (Hamilton & Collins, 1981).

Methodology

The limitations associated with definitions and sampling techniques are reflected as well in research methodology. Researchers have failed to use control groups (Russell, 1982). It is therefore impossible to determine whether heavy drinking is specific to violent behavior or equally present among nonviolent men. Second, as a result of the use of different research strategies, differing profiles of

abusers have been developed (Dutton, 1988). As previously noted, data drawn from a variety of sources have resulted in a range of pathology among abusers.

Finally, there are the issues which relate specifically to the CTS (Straus, 1979). While the CTS has overcome some of the definitional problems associated with abuse in that it is operationalized in terms of actual acts of violence (i.e., hitting, punching, kicking, etc.), it fails to take into account events which precede or follow the acts of violence being measured (Brinkerhoff & Lupri, 1988) and it does not examine the consequences of the actions being measured. Thus, the motivations which underly violent behavior and the extent of the injuries which occur as a consequence have yet to be addressed.

As in any area of research, the study of violence between partners is not without limitations. It was the goal of this study to be sensitive to these issues and to attempt to overcome some of the problems noted by way of the methods to be outlined in the following chapter.

Research Propositions

The following hypotheses were derived from the literature reviewed and were tested in this study:

1. The prevalence of partner abuse will be negatively correlated with age.

2. The prevalence of partner abuse will be negatively correlated with income.
3. The prevalence of partner abuse will be negatively correlated with employment status (i.e., full-time versus part-time versus unemployed).
4. The prevalence of partner abuse will be negatively correlated with education.
5. The prevalence of partner abuse will be positively correlated with "binge" drinking (i.e., drinking more than eight drinks per drinking session).
6. The prevalence of partner abuse will be positively correlated with alcohol dependence.
7. The prevalence of partner abuse will be positively correlated with the consumption of alcohol (i.e., the number of ounces of alcohol consumed per day).
8. The prevalence of partner abuse will be negatively correlated with self-esteem.
9. The prevalence of partner abuse will be negatively correlated with ego-strength.
10. The prevalence of partner abuse will be positively correlated with anxiety.
11. The prevalence of partner abuse will be positively correlated with neuroticism.
12. The prevalence of partner abuse will be positively correlated with extroversion.
13. The prevalence of partner abuse will be positively correlated with scores on the MacAndrew Scale (MacAndrew, 1980).

14. Alcohol consumption (i.e., the number of ounces consumed per day) will interact with the personality measures listed above in its relationship to partner abuse.

CHAPTER 3 - METHODOLOGY

This chapter examines the methodology employed in this study. The data analyzed in this study were part of a larger data set derived from the Winnipeg Health and Drinking Survey (Barnes & Murray, 1989); therefore, the methodology for this study is reflective of the methodology of the primary study. Sample selection and description, procedure for data collection, instruments and variables, and methods of data analyses used in this study are described below.

Sample Selection and Description

A random sample of adult residents of Winnipeg between the ages of 18 and 65 who were not institutionalized was provided for use in this study by the Manitoba Health Services Commission (MHSC). The initial sample was stratified by age and sex into the following categories: (1) males 18-34 years, (2) males 35-49 years, (3) males 50-65 years, (4) females 18-34 years, (5) females 35-49 years, and (6) females 50-65 years. For each sex/age cell, there were 667 randomly selected names of Winnipeg residents. At the time of this writing, 2,627 names and addresses formed the basis of the data collection. Of the total number of letters

mailed, there were 692 persons who refused to participate and 785 persons who could not be contacted. The remaining 1168 subjects formed the subject pool. For the purposes of this study only data from male subjects were analyzed (N=548).

Procedure for Data Collection

Data were obtained using an interview schedule and a self-administered questionnaire. Each personal interview was preceded by approximately one week by a letter describing the purpose of the project (see Appendix A). Respondents were invited to call the project office should they have questions or doubts. A telephone appointment was made prior to the interview. Interviews were scheduled to take place at the subject's home (unless otherwise arranged) and were estimated to last 90 minutes or less. At least five attempts were made to contact each individual to arrange for a suitable interview time. The interviews were conducted in the evenings to the extent that this was requested by the individuals.

Variables and Measures

A variety of measures were employed to test this study's hypotheses. The following is a description of the independent and dependent variables and the measures used to study them.

Independent Variables and Measures

Demographic Variables. Questions were included to measure the following demographic variables: (1) age, (2) marital status, (3) ethnicity, (4) employment status, (5) income, and 6) religion. This measure contained 20 items as well as an additional two items which screen for alcohol use (Appendix B, Part 1).

Alcohol abuse. Alcohol abuse was measured by three separate constructs.

1. Alcohol consumption was measured with the Volume-Variability Index (Cahalan & Cisin, 1968; Room, 1972). This instrument contained nine questions and measures the quantity-frequency (with an added indicator of binge drinking) of wine, beer and liquor consumption (Appendix B, Part 2). This measure is particularly relevant because violence is hypothesized to be greater among binge drinkers than among episodic drinkers.
2. Alcoholism was measured by the short form of the Michigan Alcoholism Screening Test (SMAST) (Porkorny, Miller & Kaplan, 1972), a test intended to screen individuals in the general population and one which has been widely used in other studies. This instrument contained 13 items (Appendix B, Part 3) and was designed to produce a more effective,

shorter, self-administered and more easily scored version of the original MAST. Reliability coefficient alphas computed for two comparison group scores, separately and combined yielded coefficients only slightly lower than for the MAST (Selzer, Vinokur, & Rooijen, 1975) whereas validity coefficients were found to be slightly higher for the SMAST. Based on tests for reliability and validity, the authors concluded that the SMAST is as effective as the MAST in screening for alcoholism.

3. Alcohol dependence was measured by the Alcohol Dependence Data Schedule (ADDS) (Raistrick, Dunbar & Davidson, 1983) and by the NIMH Diagnostic Interview Schedule Version III Revised (DIS III-R) (Robins, Helzer, Cattler & Goldring, 1989). The former is an instrument (Appendix B, Part 4) which has been administered to both clinical and non-clinical samples; it strongly distinguished the alcoholic sample. The split-half reliability of the 15-item short form is 0.87. Jorge and Mazur (1985) obtained a split-half reliability of 0.88 with the short form ADDS in an interview, and 0.82 when self-administered. Test-retest reliability was 0.90. The latter (Appendix B, Part 5) is a revised version of the Diagnostic Interview Schedule (Robins, Helzer, Croughan, Williams & Spitzer, 1979), designed to classify alcoholics according to the diagnostic

criteria of the Diagnostic and Statistical Manual (DSM III) (American Psychiatric Association, 1980). The instrument contained 28 items. However, only those items which provide a "lifetime diagnosis" for alcohol dependence were analysed.

Personality. Personality measures chosen for this study covered the major dimensions of personality, as well as important characteristics observed in clinical samples of wife batterers.

1. The Rosenberg Self-Esteem Scale (1965) consists of 10 items (Appendix B, Part 6), has satisfactory reliability and validity (Rosenberg, 1965) and has been found to relate to both alcoholism (Beckman, 1978) and male perpetrators of spouse abuse (Goldstein & Rosenbaum, 1985; Rouse, 1988).
2. The Trait Anxiety Scale was developed by Spielberger, Gorsuch and Lushene (1970). Since neuroticism was found to be one of the dimensions of personality predictive of abuse among college males (Barnes, Greenwood & Sommer, 1989) anxiety was also expected to be an indicator of abuse. This test has satisfactory reliability and validity and is the most widely used measure of anxiety. This measure consisted of 20 items and is found in Appendix B, Part 7.

3. The Eysenck Personality Questionnaire (EPQ-R) is a commonly used personality inventory. It measures neuroticism, introversion-extroversion, psychoticism, and it contains a lie scale. While the neuroticism and introversion-extroversion scales are well established tests of personality, the psychoticism dimension is newer and has been a source of controversy. It had been criticized for low reliabilities (i.e., .74 for males and .68 for females) (Torrubia & Muntaner, 1987). The revised version contains 100 items and was used in this study. It has been found to have improved reliability (.78 and .76 respectively). As well the two psychoticism scales have been found to correlate reasonably well (i.e., .86 for males and .79 for females). The revised version has already been used in one study predicting abuse (Barnes, Greenwood & Sommer, 1989).
4. Two MMPI subscales were used in this study, the MacAndrew Alcoholism (MAC scale) and the Barron Ego-Strength Scales. Both are important measures for discriminating alcoholics from nonalcoholics and for predicting risk factors for alcoholism.
 - a) The MAC scale has been successfully cross validated against samples similar to those on which it was originally developed (alcoholics

versus non-substance abusing psychiatric patients) (MacAndrew, 1980). A factor analysis conducted on the MAC scale showed factor loadings which described alcoholics (high scorers) as resembling criminals and delinquents. As well, research by MacAndrew (1980) found that 85% of male alcoholics measured on the MAC scale were classified as "secondary psychopaths" (neurotic extroverts) according to Eysenck's model of personality. This relationship suggests that the MAC scale is an appropriate measure to be considered in the study of partner abuse. The MAC scale contained 51 items and is found in Appendix B, Part 9.

- b) The Barron Ego-Strength Scale measures a general factor of the capacity for personality integration (Greene, 1980). For example, persons who score high on ego-strength are described as having secure self concepts and are able to cope with situational stress. Individuals who score low on ego-strength tend to have low self concepts and are more likely to experience chronic, characterological problems (Greene, 1980). It might also be expected that those with less integrated personalities experience lower levels of impulse control and resort to more primitive methods of coping such as violence. The Barron Ego-Strength Scale contained 67 items and is found in Appendix A, Part 10.

Dependent Variable and Measure

Partner abuse. The instrument chosen to measure and define partner abuse in this study was the Conflict Tactics Scale (CTS) (Straus, 1979). The scale was designed to test the "catharsis theory" of violence by measuring the following three modes of interpersonal conflict resolution: (1) reasoning (the use of discussion), (2) verbal aggression (the use of verbal and nonverbal acts which symbolically hurt another person), and (3) violence (the use of physical force against another person). The latter two modes of violence were tested in this study.

While the scale has been revised since its inception, its original version, Form A (Straus, 1974) was employed in this study using the last 6 of the 14 scale items (See Appendix C). Limiting the number of scale items was an arbitrary decision made by the investigators of the Winnipeg Health and Drinking Survey based on the length of the survey. The items chosen for use in this study represented the most severe forms of partner abuse.

The scale also measures the frequency with which abusive actions occur in terms of relative rather than absolute numbers ("never" to "more than once a month"). Furthermore, the items in this study were worded in the second person rather than in the first person with the hope of inviting a greater acknowledgement of abuse. Finally, the scale has

been used in face-to-face (Kennedy & Dutton, 1989; Schulman, 1981; Smith, 1987; Straus, Gelles & Steinmetz, 1980), telephone interviews (Kennedy & Dutton, 1989; Straus & Gelles, 1986) and mail surveys (Straus, 1979). It has demonstrated moderate to high reliabilities (alphas ranging from means of .74 to .88) and evidence of concurrent and construct validity (Straus, 1979).

Data Analysis

Data in this study were analyzed with the Statistical Package for the Social Sciences, version X (SPSSx) and Statistical Analysis Systems (SAS). Data were analyzed in the following three stages:

1. Frequency analyses were conducted to describe the sample in terms of the rates of violence and demographic features using percentages and means. As well, at this stage of analysis it was possible to determine whether scale distributions were skewed. For example, there was the concern that the VVI scale may be vulnerable to skewness, and if such was the case it would have to be transformed in an attempt to normalize its distribution. This would allow subsequent correlational analysis to be performed with greater confidence.
2. Second, Pearson Correlations were computed to determine the interrelationships among variables.

The strengths of the correlations were used to determine whether single or multiple measures of alcohol abuse and personality were to be entered in the next stage of analysis. As well, decisions regarding the role of alcohol consumption as a possible mediating variable were made.

3. The third and final stage of analysis involved the standard multiple regression of the independent variables against the dependent variable (CTS). By inspecting the individual and combined effects of alcohol abuse, personality and demographic measures, the multiple regression procedure revealed those independent variables which best predicted partner abuse by explaining the largest amount of variance.

Listed below are the procedures used to test the research propositions in this study:

1. Research Proposition #1 to #13 were tested by Pearson's correlations.
2. Research Proposition #14 was tested by a standard multiple regression procedure.

CHAPTER 4 - RESULTS

Reliability of Scales

Prior to statistical analyses, reliability tests were performed on the following independent and dependent measures: (1) the EPQ-R (EPQP, EPQN, EPQE, EPQL), (2) the Barron Ego Strength Scale, (3) the MAC Scale, (4) the Rosenberg Self-Esteem Scale, (5) the Spielberger Trait Anxiety Scale, and (6) the CTS. The remaining alcohol measures (VVI, SMAST and the DIS) were not tested for reliability since they provided indices of alcohol related behaviours.

Reliability was tested by Cronbach's Alpha coefficients which tested the proportion of variance due to common factors among the items in the scale. In other words, this test of reliability examines the degree of internal consistency found within scale items. According to Kerlinger (1973) a reliability coefficient of .60 or better would be needed in order that the scale be considered at least moderately reliable. Listed below are the scale characteristics and reliability coefficients for the measures put to the test of reliability.

The Eysenck Personality Questionnaire Revised

The following are the four subscales which make up the EPQ-R: psychoticism, neuroticism, extraversion-introversion and a validity scale (lie scale). Respondents were asked to answer "YES" or "NO" to all subscale items.

1. The EPQP is composed of 32 items. The scale range was 0 to 17 with a mean of 3.89 (SD= 2.74). The scale was found to just meet the criterion of reliability ($\alpha = .60$)
2. The EPQN is composed of 24 items. The scale range was 0 to 24 with a mean of 8.79 (SD= 5.17). The scale was found to be reliable ($\alpha = .85$).
3. The EPQE is composed of 22 items. The scale range was 0 to 23 with a mean of 13.71 (SD= 5.01). The scale was found to be reliable ($\alpha = .82$).
4. The EPQL can also be considered as a measure of social conformity. It is composed of 21 items. The scale range was 0 to 21 with a mean of 9.79 (SD= 4.56). The scale was found to be reliable ($\alpha = .83$).

Barron Ego Strength Scale

The Barron Ego Strength Scale is composed of 67 items. Respondents were asked to answer "TRUE" or "FALSE" to each of the scale items. The scale range was 22 to 59 with a mean of 46.59 (SD= 5.72). A moderate amount of internal consistency was found in this study (Cronbach's $\alpha = .67$).

The MacAndrew Scale

The MAC Scale is composed of 49 items. As with the Barron Ego Strength Scale, respondents were asked to answer "TRUE" or "FALSE" to the scale items. The scale range was 12 to 35 with a mean of 22.29 (SD= 3.86). The alpha coefficient was .43. The lack of internal consistency found using the Cronbach's Alpha test of reliability is likely due to the multidimensional nature of the scale. This finding was surprising in light of the scale's wide use and repeated validity. In spite of the scale's demonstrated low reliability, it was still considered an appropriate measure because of its ability to distinguish between alcoholic and nonalcoholic populations (MacAndrew, 1980).

Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale is composed of 10 items. Respondents were asked to indicate the extent to which they agreed or disagreed with each scale item. Scale item responses followed this four point scale: (1) strongly agree, (2) agree, (3) disagree, and (4) strongly disagree. The scale range was 10 to 40 with a mean of 33.29 (SD= 4.44). The scale was found to be reliable ($\alpha = .83$).

Spielberger Trait Anxiety Scale

The Spielberger Trait Anxiety Scale is composed of 20 items. Respondents were asked to indicate the extent to which they experienced scale items. This measure was also based on a four point scale. The item values were as follows: (1) almost never, (2) sometimes, (3) often and (4) almost always. The scale range was 20 to 65 with a mean of 34.08 (SD= 8.32). The scale was found to be reliable ($\alpha = .85$).

Alcohol Dependence Data Schedule

The ADDS Scale is a scale composed of 15 items. As in the previous scale, respondents were asked to indicate the extent to which they experienced the scale items. Scale values were similar to the Trait Anxiety Scale and were as follows: (1) never, (2) sometimes, (3) often, and (4) nearly always. The scale range was 0 to 14 with a mean of 1.46 (SD= 2.39). The scale was found to have moderate internal consistency (Cronbach's $\alpha = .68$).

Conflict Tactics Scale

For the purposes of this study only six items of the CTS were selected. As noted previously, these items reflected the most severe forms of physical abuse. Respondents were asked to indicate how often they participated in the various

forms of conflict resolution as reflected by the scale items. The CTS was constructed on the following six point scale: (1) never, (2) once a year, (3) two to three time a year, (4) often, but less than once a month, (5) about once a month, and (6) more than once a month. The scale range was 6 to 20 with a mean of 6.57 (SD=1.40). As expected the scale distribution was positively skewed (ie. item responses clustered around the least severe forms of abuse). The scale was found to be reliable ($\alpha = .75$).

Table 1 provides a summary of scale characteristics and reliability coefficients for all the above measures.

TABLE 1
Scale Characteristics and Reliability Coefficients

Scale	Range	Mean	Standard Deviation	Alpha
EPQ-R				
EPQP	0-17	3.89	2.74	.60
EPQN	0-24	8.79	5.17	.85
EPQE	0-23	13.71	5.01	.82
EPQL	0-21	9.17	4.53	.82
EGO STRENGTH	22-59	46.59	5.72	.67
MAC	12-35	22.29	3.86	.43
SELF-ESTEEM	10-40	33.29	4.44	.83
TRAIT ANXIETY	20-65	34.08	8.32	.84
ADDS	0-14	1.46	2.39	.68
CTS	6-20	6.57	1.40	.75

Demographic Characteristics

The analyses for this research were conducted on data provided by the Winnipeg Health and Drinking Survey. The total sample size was 1168 subjects. For the purposes of this study, only the data from male subjects were analysed. Data collected from 548 males formed the basis of this sample. The subsample from which abusers were drawn

consisted of males who were married and married but previously divorced. This subsample consisted of 394 subjects. The demographic characteristics of the subsample are outlined below. Table 2 provides a complete summary for both total sample and subsample demographic characteristics.

Age

The mean age of male respondents in the subsample was 45.9 years. The range in age was 22 to 66 years. The distribution of ages was as follows: 93 (24%) were between the ages of 18 and 35 years, 119 (30%) were between the ages of 36 and 49 years, and 182 (46%) were 50 years and older.

Marital Status

Of the total sample, 381 subjects (70%) were married. These subjects made up 96.7 percent of the subsample used in the partner abuse analyses. Persons who were married but previously divorced were represented by 13 subjects (3%).

Educational Status

Analyses were conducted on six levels of educational status in this research. The following represents the distribution of subjects among the education categories in the subsample: 25 (6%) received a grade school education, 83 subjects (21%) received some high school education, 81

subjects (20%) completed high school, 100 (25%) completed some college education or earned a technical diploma, 60 (15%) were university graduates and 45 subjects (12%) received post graduate or higher education.

Current Employment Status

Those employed full time in the subsample were represented by 317 (81%) subjects. The remaining 77 subjects (20%) were distributed among the following categories: 12 subjects (3%) were working part time, 10 (2%) were unemployed but looking for work, 25 subjects (11%) were categorized as retired, and 10 subjects (2%) were categorized as "other", not belonging to any of the above categories.

Income

Total family income was distributed among five broadly based categories in the following manner within the subsample: 6 subjects (1%) had a family income less than \$10,000 annually, 14 subjects (3%) had a family income between \$10,000 and \$20,000 annually, 83 subjects (22%) had a family income between \$20,000 and \$35,000 annually, 113 subjects (29%) had a family income between \$35,000 and \$50,000 annually, and 169 subjects (44%) had a family income over \$50,000 annually. Only one respondent in the subsample refused to provide a response while eight respondents stated they did not know their total family income.

Religious Preference

Of the total sample, 65% were represented by two religious groups; 143 subjects (27%) were Catholic and 209 subjects (38%) were Protestant. The subsample was similarly represented by the same two groups (71%); 105 subjects (27%) were Catholic and 172 subjects were Protestant (44%). The remaining 196 subjects (37%) in the total sample and 116 subjects (30%) were distributed among the following: 11 subjects (1%) and 10 subjects (2%) were Jewish, 67 subjects (12%) and 44 subjects (11%) were categorized as other (i.e., not belonging to any of the listed religious groups), and 115 subjects (21%) and 62 subjects (15%) had no religious preference.

Race

The White racial group was represented by 365 subjects (92%) of the subsample. The remaining 29 subjects (7%) were distributed as follows: six subjects (1%) were Black, 15 subjects (4%) were Asian, six subjects (2%) were Native, and two subjects (less than one percent) were categorized as "other" (i.e., not belonging to any of the listed racial groups).

TABLE 2

Demographic Characteristics of Male Subjects

Category	Total Sample		Married	
	N	%	N	%
Mean Age	41.83 Years		45.90 Years	
Age Groups				
18-35 Years	201	36.7	93	23.6
36-49 Years	148	27.0	119	30.2
50 Years +	199	35.0	182	46.2
Total	548	100.0	394	100.0
Marital Status				
Single	126	23.0	-	-
Married	381	69.5	381	96.7
Widowed	5	0.9	-	-
Divorced	23	4.2	-	-
Married, but previously Divorced	13	2.4	13	3.3
Total	548	100.0	394	100.0
Educational Status				
Grade School	30	5.5	25	6.4
Some High School	105	19.2	83	21.1
High School Completed	125	22.8	81	20.6
Some College or a Technical Diploma	150	27.4	100	25.4
University Graduate	84	15.3	60	15.2
Post Graduate Education	54	9.8	45	11.5
Total	548	100.0	394	100.0
Current Employment Status				
Working Full Time	403	73.5	317	80.5
Working Part Time	22	4.0	12	3.0
Unemployed, but looking	25	4.6	10	2.5
Student	36	6.5	-	-
Retired	48	8.8	45	11.4
Other	14	2.6	10	2.5
Total	548	100.0	394	100.0

Table 2 cont'd...

Table 2 (continued)

Category	Total Sample		Married	
	N	%	N	%
Income				
< \$10,000/Yr	21	4.0	6	1.3
\$10,000-\$20,000/Yr	29	5.5	14	3.6
\$20,000-\$35,000/Yr	121	22.9	83	21.6
\$35,000-\$50,000/Yr	137	25.9	113	29.4
> \$50,000/Yr	214	40.5	169	43.9
Total	522	98.8	385	99.8
Religious Preference				
Catholic	143	26.5	105	26.7
Protestant	209	38.2	172	43.8
Jewish	11	1.2	10	2.5
Other	67	12.2	44	11.2
No Religious Preference	115	21.0	62	15.8
Total	545	99.1	393	100.0
Race				
White	503	91.8	365	92.6
Black	9	1.6	6	1.5
Asian	22	4.0	15	3.8
Native	9	1.6	6	1.5
Other	5	0.9	2	0.5
Total	548	100.0	394	100.0
	n=548		n=394	

Note: Not all totals will equal 548 or 394 (100%) due to missing data.

The Prevalence of Partner Abuse

The prevalence of partner abuse was determined by the analysis of frequency data and is summarized in Table 3. Ten missing cases were found among those asked the abuse items. Of the remaining 384 cases, 97 (25.5%) males participated in at least one abusive incident with their current partner. The abuse items chosen for use in this study were presented to the subjects beginning with the least severe form of abuse and ending with the most severe form of abuse.

The figures presented in the table below reflect the number of times a particular abusive tactic was engaged in by male subjects with their current partner. Results indicated the following: 64 occurrences in which subjects threw or smashed something, but not at partners (14%); 34 occurrences of subjects threatening to throw something, but not at partners (6%); 25 occurrences in which subjects threw something at their partners (3%); 73 occurrences in which subjects pushed, grabbed or shoved their partners (16%); 37 occurrences in which subjects hit their partners (9%); and two occurrences in which subjects hit their partner with something hard (less than one percent).

The most common abusive tactic endorsed by this sample and ranking as the third most severe form of abuse according to the scale was "pushing, grabbing and shoving".

Alternatively, the least common abusive tactic endorsed by this sample was "hitting partner with something hard". According to the CTS, this item was also ranked the most severe form of abuse.

TABLE 3

Frequency of Partner Abuse among Married and Married, but Previously Divorced Males

Item	Number of Occurrences	%
Threw or smashed something (but not at partner)	64	14.1
Threatened to throw something (but not at partner)	34	6.2
Threw something at partner	25	3.9
Pushed, grabbed or shoved partner	73	16.4
Hit partner	37	9.4
Hit partner with something hard	2	.6

* N=394

Note: * There were 10 missing cases.

Scale Statistics: Mean = 6.57, SD = 1.40, Range = 6-20

Correlations Among Variables

Pearson's Correlation analyses were conducted to examine the following: (1) the relationship among demographic variables and abuse, (2) the relationship between alcohol consumption and partner abuse, (3) the relationship between personality and partner abuse, and (4) the relationship among alcohol measures as well as the relationship among personality measures. The latter sets of analyses were conducted in an effort to assess any potential problems associated with multicollinearity (i.e., the intercorrelation of the independent variables) when conducting later regression analyses. The multicollinearity problem can be eliminated by selecting from among the independent variables such as choosing the best measures along any one dimension of alcohol and personality (Lin, 1976) or by combining predictors.

Demographic Variables and Partner Abuse

A correlation matrix of demographic variables and partner abuse is presented in Table 4. Variable transformations (creating dummy variables from existing variable values) were performed on the following categorical variables: religion, race and part of the employment status variable, classified as student, retired and other. In so doing, these newly transformed variables could be appropriately entered into a Pearson's Correlation equation. The

variables created were structured such that the value "1" equalled the presence of a particular value such as "yes, belonging to the white racial group" and "0" equalled the absence of that value such as "belonging to any other racial group". Further transformations were performed on educational status and the remaining values of employment status of full time, part time, and unemployed. The former was transformed so that its values reflected the number of years of schooling achieved. These were scored as follows: "1" equalled "six years", "2" equalled "10" years, "3" equalled "12 years", "4" equalled "13 years", "5" equalled "15 years", "6" equalled "18 years", and "7" equalled "22 years". These values corresponded to the original values of the variable educational status which were: completed grade school, some high school, completed high school, some college, university graduate, post graduate studies, and masters' or doctorate degree. The remaining values of employment status were transformed into a variable called "empstat" reflecting one's employment status or time in the workforce whereby "1" equalled "unemployed", "2" equalled "employed part time", and "3" equalled "employed full time".

The analysis performed failed to demonstrate any strong correlations between any of the demographic variables and abuse. Only employment status, time spent in the work force, was moderately correlated with partner abuse ($r = -.22$). In other words, males who were unemployed were more likely to abuse their partners.

TABLE 4

Pearson Correlation Coefficients: Demographics and Partner Abuse

Partner Abuse (Conflict Tactics Scale)	r
Age	- .07
Income	.009
Level of Education (in years)	- .03
Employment Status	- .22 ***
Retired	.01
Other Employment Category	- .01
Catholic	.03
Protestant	- .05
Other Religious Preference	.02
White Racial Group	- .07

Note: *** denotes $P < .001$

Alcohol and Partner Abuse

Table 5 provides correlation coefficients for alcohol measures and partner abuse. Results indicated several weak to moderate positive correlations between the dependent measure, partner abuse and alcohol. They are as follows:

1. Heavy drinking, the number of instances when drinking more than 8 glasses of wine, beer or liquor

- was positively correlated with the occurrence of partner abuse ($r = .15$).
2. Ethanol, the number of ounces of alcohol consumed per day was positively correlated with the occurrence of partner abuse ($r = .17$).
 3. The Alcoholism Dependence Diagnostic Schedule (ADDS) was positively correlated with the occurrence of partner abuse ($r = .21$).
 4. The Michigan Alcoholism Screening Test (MAST) was positively correlated with the occurrence of partner abuse ($r = .20$).
 5. The Diagnostic Interview Schedule (DIS) was positively correlated with the occurrence of partner abuse ($r = .13$).

It should be noted that the first two variables are measures of alcohol consumption. The latter three variables are both measures of alcohol dependence or alcoholism. An interesting observation is the significant correlation between Ethanol and partner abuse and the lack of significance between Alcohol Volume and partner abuse. While both these variables measured the amount of alcohol consumed, the attenuation of the correlation between Alcohol Volume and partner abuse is likely due to its restricted range. Alcohol Volume has a range of 1 to 4 whereas Ethanol has a range of 0 to 9.9.

TABLE 5

Pearson Correlation Coefficients: Alcohol and Partner Abuse

Partner Abuse (Conflict Tactics Scale)	r
Heavy Drinking	.15 **
Max	.03
Alcohol Volume	.07
Ethanol	.17 ***
ADDS	.21 **
MAST	.20 ***
DIS	.13 **

Note: ** denotes $P < .01$

*** denotes $P < .001$

Personality and Partner Abuse

This study employed five measures of personality to investigate its relationship with alcohol abuse in the occurrence of partner abuse. The Eysenck Personality Questionnaire Revised (EPQ-R) measured four separate dimensions of personality (i.e., neuroticism, psychoticism, extroversion, and a lie scale) and were likewise represented by similarly named subscales. The other scales (Barron Ego Strength, Spielberger Trait Anxiety, MacAndrew and Rosenberg Self-Esteem) were analysed as full scales for the purposes

of this study. As with the alcohol measures, there were several significant although weak correlations found between personality and partner abuse. The following are the personality measures which provided the highest correlations with partner abuse:

1. Neuroticism was positively correlated with partner abuse ($r = .20$).
2. The Lie scale was negatively correlated with partner abuse ($r = - .16$).
3. Anxiety was positively correlated with abuse ($r = .10$).
4. Self-esteem was negatively correlated with partner abuse ($r = - .11$).
5. Ego strength was negatively correlated with partner abuse ($r = -.11$).

Table 6 summarizes the correlation coefficients for personality measures and partner abuse.

TABLE 6

Pearson Correlation Coefficients: Personality and Partner Abuse

Partner Abuse (Conflict Tactics Scale)	r
EPQE	.09
EPQP	.08
EPQN	.20 ***
EPQL	- .16 **
Ego Strength	- .11 *
Trait Anxiety	.10 *
Mac Andrew Scale	.09
Self-esteem	- .11 *

Note: * denotes $P < .05$

** denotes $P < .01$

*** denotes $P < .001$

Correlations among Alcohol Measures

Pearsons Correlations were conducted on the alcohol measures employed in this study. For this particular test, data of current drinking males who were married, or married but previously divorced were analysed. Excluding recent and lifetime abstainers was deemed appropriate since this study was interested in examining current and not past drinking behavior in its relationship to partner abuse.

Three separate constructs of drinking behaviour were measured in this study: (1) alcohol consumption (VVI), (2) alcohol dependence (ADDS and the DIS) and (3) alcoholism (SMAST).

The VVI was divided into subscales in order to measure the amount of alcohol consumed as well as the frequency of its consumption. The variable labelled "Ethanol" provided values for the amount of alcohol consumed measured in ounces per day. The variable labelled "Alcohol Volume" also measured the amount of alcohol consumed by combining the frequency of drinking with the number of glasses of alcohol consumed for wine, beer and other alcoholic beverages. The values for this variable reflected the number of glasses of alcohol consumed at a sitting during the past month. The variable labelled "Maximum Drinking" identified those subjects who consumed more than eight drinks per sitting in the past 12 months ("1" equals more than eight drinks per sitting and "0" equals having less than eight drinks per sitting). This variable identified those subjects who experienced "binge" drinking. The variable "Heavy Drinking" measured the frequency of binge drinking. The value "1" equals binging 1-3 times per month, "2" equals binging 3-4 times per week, and "3" equals binging everyday.

The ADDS and DIS scales measured alcohol dependence. The former was scored such that a low score represented low alcohol dependency while a high score represented high

alcohol dependency. The latter scale was divided into several subscales. For the purposes of this study only the subscale "lifetime diagnosis of alcohol abuse/dependency" was used. The values of this scale were derived from several other DIS subscales, i.e., dependency symptoms, dependency symptoms beyond one month, abuse and/or hazardous use of alcohol, and abuse and/or hazardous use of alcohol beyond one month. This subscale was further transformed for this correlational analysis by dichotomizing the subscale values such that "1" equalled "a diagnosis of alcohol abuse and/or dependency" and "0" equalled "no diagnosis of alcohol abuse and/or dependency". The final alcohol measure, the SMAST measured alcoholism. This scale was scored similarly to the ADDS whereby a low score represented low alcoholism and a high score represented high alcoholism.

Results indicated several moderate to high correlations within and between the three drinking behavior constructs. The following are those variables which provided the highest correlations:

1. The number of drinks consumed during a drinking session (Alcohol Volume) was positively correlated with Ethanol, the number of ounces of alcohol consumed ($r = .62$).
2. Both dependency scales, ADDS and the DIS, were positively correlated with SMAST, alcoholism such that:

- a) The DIS, the lifetime diagnosis of alcohol abuse/dependence was positively correlated with alcoholism (SMAST) ($r = .53$) and
 - b) the ADDS was also positively correlated with alcoholism (SMAST) ($r = .56$).
3. Finally, the dependence measures listed above (i.e., ADDS and DIS) also showed moderate positive correlations with each other ($r = .46$).

Table 7 provides a correlation matrix of all alcohol measures employed in this study.

TABLE 7

Pearson Correlation Coefficients: Alcohol Abuse Measures

Alcohol Measures							
	1	2	3	4	5	6	7
1. Heavy Drinking		.07	.10	.17**	.09	.10	.06
2. Maximum Drinking			.32***	.26***	.27***	.23***	.22***
3. Alcohol Volume				.62***	.23***	.16**	.13*
4. Ethanol					.22***	.16*	.20***
5. ADDS						.46***	.56***
6. DIS							.53***
7. SMAST							
(n = 354)							

Note: * denotes $P < .05$

** denotes $P < .01$

*** denotes $P < .001$

Correlations among Personality Measures

As noted previously, five major scales were used to examine various dimensions of personality: (1) the Eysenck Personality Questionnaire Revised, measuring psychoticism,

neuroticism, introversion-extraversion and lie scale, (2) Spielberger Trait Anxiety Scale, (3) MacAndrew Scale, (4) Barron Ego Strength Scale and (5) the Rosenberg Self-Esteem Scale.

Results indicated several significant correlations among the various personality measures. The following measures were moderately to highly intercorrelated with r values greater than .40:

1. Ego-strength was negatively correlated with neuroticism ($r = -.52$) and Anxiety ($r = -.55$) while positively correlated with Self-esteem ($r = .42$).
2. Neuroticism was positively correlated with Anxiety ($r = .68$) and negatively correlated with Self-esteem ($r = -.50$).
3. Anxiety was negatively correlated with Self-esteem ($r = -.67$).

The EPQ-R subscales produced the following weak to moderate correlations:

1. Neuroticism was negatively correlated with Extraversion ($r = -.15$).
2. The Lie Scale was negatively correlated with neuroticism ($r = -.18$) and Psychoticism ($r = -.14$). These low correlations indicate a low tendency to fake good (Eysenck & Eysenck, 1975). Under strong pressure to dissimulate these correlations will be much higher.

3. Extroversion was positively correlated with the MAC Scale ($r = .37$), Ego Strength ($r = .19$) and Self-Esteem ($r = .24$), and negatively correlated with Anxiety ($r = -.24$).
4. Psychoticism was positively correlated with the MAC scale ($r = .10$) and Anxiety ($r = .19$) and negatively correlated with Self-Esteem ($r = -.13$).

Table 8 provides a correlation matrix of all personality measures employed in this study.

TABLE 8

Pearson Correlation Coefficients: Personality Measures

Personality Measures								
	1	2	3	4	5	6	7	8
1. EPQN	.05	-.15**	-.18***	-.52***	-.07	.68***	-.50***	
2. EPQP		.06	-.14**	-.09	.10*	.19***	-.13**	
3. EPQE			-.06	.19***	.37***	-.24***	.24***	
4. EPQL				-.14	.04	-.04	.06	
5. EGOST					-.09	.55***	.42***	
6. MAC						.02	.008	
7. Trait								-.67***
8. Esteem								

Note: * denotes $P < .05$

** denotes $P < .01$

*** denotes $P < .001$

Multiple Regression Analyses

Multiple regression analyses were used to examine the amount of variance explained in partner abuse by the independent variables. First, the capacity of demographic measures, alcohol consumption and dependence measures, and personality measures to predict partner abuse were examined separately. Second, the combined capacity of the

independent measures to predict partner abuse was examined. Finally, the interaction between alcohol consumption, Ethanol, and personality was tested in regression equations which examined the independent effects of demographic, alcohol and personality measures, as well as examining their combined effects to predict partner abuse.

Selection of the Variables and Variable Transformations

Based on the results of the previously described correlational analyses and with theoretical support, it was possible to select the scales listed below as those best suited for entry into the multiple regression equations.

Alcohol measures. In order to avoid the problems associated with multicollinearity, the following alcohol scales were selected: Ethanol, SMAST, ADDS, and the DIS. It was decided to enter the first variable, Ethanol as a separate measure. This variable measures alcohol consumption and was found to correlate significantly with partner abuse. The latter three variables reflect alcohol dependence (ADDS and DIS) and alcoholism (SMAST). They also correlated moderately to highly with each other.

When preliminary regression analyses were conducted examining each dependency measure individually along with alcohol consumption the resulting adjusted R Square coefficients for these measures were found: DIS .03, MAST

.06 and ADDS .06. The amount of variance explained by the DIS measure was slightly less than the other measures. Nevertheless, the results indicated similarities among these measures in terms of the amount of variance they explained. The consistency in these findings provided greater validity in the testing of the alcohol dependence construct. It was therefore decided to construct an alcoholism index by assigning values to scores which fell above and below a predetermined scale cutoff based on findings of alcohol studies employing these measures. The value "1" was assigned to scores above the cutoff and were reflective of subjects who were alcoholic. The scores below the cutoff were assigned the value of "0". This value was reflective of subjects who were nonalcoholic. The values were then summed to produce a possible scale range of 0 to 3. A score of zero was reflective of being alcoholic on no indicators while a score of three was reflective of being alcoholic on all indicators. Frequency data revealed that 319 subjects (81%) had scores of zero. The remaining 75 subjects (19%) were distributed as follows: 61 subjects (16%) had scores of one, 12 subjects (3%) had scores of two and only two subjects (less than one percent) revealed a score of three. This new alcohol index together with Ethanol represents the three alcohol abuse constructs outlined in this study.

Personality measures. The personality measures found to be most suitable for entry into the multiple regression

equations were: the Barron Ego Strength Scale, the Spielberger Trait Anxiety Scale, the EPQN Scale, and the Rosenberg Self-Esteem Scale. The above measures demonstrated moderate to high intercorrelations as well as weak to moderate correlations with partner abuse.

In order to avoid the problem of multicollinearity, a new measure of neuroticism (called "neurotic") was created. A conservative approach toward the handling of the intercorrelations found among the above measures (r values ranging between .42 and .68) supported this procedure. In addition each measure was tested separately in a regression analysis to determine the amount of variance explained by each measure in the occurrence of partner abuse. Results indicated that the adjusted R Square coefficients were as follows: EPQN .06, Baron Ego-strength .06, Spielberger Trait Anxiety .04 and Rosenberg Self-Esteem .05. As with the alcohol dependency measures slight differences were found. Nevertheless, the similarity among them provided validity to the measurement of the construct of neuroticism.

The index was constructed in the following manner: First, in order that the scale values of the new variable would reflect neuroticism as high score, scale values for the Rosenberg Self-Esteem and the Barron Ego-Strength Scales were reversed. Second, standard scores (Z) of the selected measures were obtained. Following that procedure, the new variable was computed by averaging the means of the scales' Z scores.

A review of the literature on personality measures provided additional support for the combining of the above measures. When measuring the construct of self-concept, Rosenberg (1979) found that a multiplicity of components (including ego-strength and self-esteem) played a role in self evaluation. In later research, Rosenberg (1981) found that anxiety, depression, global self-esteem, somatic symptoms and negative affective states were associated with low feelings of "mattering", the feeling of making a difference in the lives of others. Finally, anxiety and neuroticism have been closely linked in research conducted by Krishna (1980), Ray, (1986) and Steer and Kotzker (1980).

Examining the Main Effects of the Independent Measures

The three sets of independent measures (demographic variables, alcohol abuse and personality) were entered separately in regression equations in order to determine the total effects of each group of predictors on the dependent measure (CTS).

Demographics. Of the eight demographic variables entered into the equation, being nonwhite and being unemployed were found to be significantly related to partner abuse (see Table 9). This equation accounted for six percent of the variance in partner abuse.

TABLE 9

Partner Abuse Predicted by Demographic Characteristics

Predictor	Partner Abuse (CTS)		
	r	Beta	R ²
White	-.12*	-.10*	
Other Religions (Jewish, no religion)	.04	.56	
Employment Status	-.22***	-.23***	
Age	-.10	-.09	
Years of Education	-.06	-.06	
Income	-.03	.07	
Catholic	.003	.47	
Protestant	-.03	.55	
Equation			.08

Note: * $p < .05$

*** $p < .001$

$F(8,316) = 3.63, p < .001, \text{adj. } R^2 = .06$

Alcohol measures. Alcohol consumption (Ethanol) and dependence (Alcohol) were both found to be significantly related to partner abuse (see Table 10). In other words, heavy drinking and a high score on alcohol dependence were related to partner abuse. The equation explained 7 percent of the variance in partner abuse.

TABLE 10

Partner Abuse Predicted by Alcohol Consumption and
Dependence

Predictor	Partner Abuse (CTS)		
	r	Beta	R ²
Ethanol	.17***	.13**	
Alcohol	.20***	.16**	
Equation			.08

Note: ** p < .01

*** p < .001

F(3,377) = 11.02, p < .001, adj. R² = .07

Personality measures. When personality measures were regressed against the dependent measure, three significant variables were revealed: (1) neuroticism index (neurotic), (2) social conformity (EPQL), and (3) extroversion (EPQL) (see Table 11). The equation explained 6 percent of the variance in partner abuse.

TABLE 11

Partner Abuse Predicted by Personality Measures

Predictor	Partner Abuse (CTS)		
	r	Beta	R ²
MAC	.09*	.04	
Neurotic	.16***	.18**	
EPQP	.08	.02	
EPQL	-.16***	-.15**	
EPQE	.09*	.11*	
Equation			.07

Note: * p < .05

*** p < .001

F(5,372) = 5.95, p < .01, adj. R² = .06

Examining the Combined Main Effects of the Independent Measures

Entering all the independent measures into one equation provided findings that differed somewhat from the findings of the separate main effects analyses, see Table 12. The following variables were found to significantly predict partner abuse: being unemployed, belonging to a nonwhite racial group, scoring low on the EPQL, scoring high on alcohol dependence and neuroticism indexes, and consuming

large quantities of alcohol. The equation explained 17 percent of the variance (adjusted R^2) in partner abuse.

TABLE 12

Partner Abuse Predicted by Demographics, Alcohol Dependence
and Personality Measures

Predictor	Partner Abuse (CTS)		
	r	Beta	R ²
MAC	.10*	.02	
Employment Status	-.22***	-.22***	
EPQL	-.17***	-.15**	
Protestant	-.03	.51	
Ethanol	.21***	.17**	
Age	-.10	-.06	
White	-.12*	-.14**	
Alcohol	.21***	.13**	
Neurotic	.19***	.16**	
Years of Education	-.06	-.05	
EPQP	.12*	.01	
Income	-.03	.08	
EPQE	.06	.05	
Catholic	-.005	.41	
Other Religions (Jewish, no religion)	.04	.50	
Equation			.21

Note: * $p < .05$

** $p < .01$

*** $p < .001$

$F(15,305) = 5.42, p < .001, \text{adj. } R^2 = .17$

Testing an Interactive Model: Alcohol and Personality

In order to investigate the interaction effects of alcohol and personality (alone and in combination with the other sets of measures) in predicting partner abuse, a new variable was created by multiplying the values of Ethanol (ounces of alcohol consumed daily) with those of the personality measures. The regression analysis predicting abuse towards one's partner, which includes interacting effects is presented in Table 13. This regression analysis involved the examination of the interaction effects of alcohol and personality on all the independent measures. When the interaction effects of alcohol and personality were added to this full model regression equation, being nonwhite and unemployed were again found to be significantly related to partner abuse. However, compared to the main effects model alcohol consumption and alcohol dependence were no longer found to be significantly related to partner abuse. Instead, ETHNEUR (alcohol and Neuroticism Index) interacted positively and contributed significantly to the equation. Moreover, a greater amount of the variance (24 per cent) in partner abuse was explained by the inclusion of interactive effects when compared to the main effects model (17 per cent).

A breakdown procedure was performed in order to assess the nature of the interaction effect between alcohol consumption and the neuroticism index. Figure 2 provides an illustration of the results. The findings revealed a curvilinear relationship between neuroticism and partner abuse for low alcohol consumers whereby low and high scoring neurotics demonstrated lower scores in partner abuse and moderate scoring neurotics demonstrated the highest partner abuse scores. On the other hand, the relationship between neuroticism and partner abuse for higher alcohol consumers was quite different. A linear relationship was found to exist between these variables regarding the occurrence of partner abuse. Moreover, the partner abuse scores for subjects low in neuroticism were similar in both low and high alcohol consumption groups ($M=6.37$ and $M=6.32$, respectively). The results indicated that the amount of alcohol consumed has its greatest effect on individuals scoring high in neuroticism. For individuals scoring high on neuroticism, low to moderate consumption of alcohol appeared to have a moderating effect on partner abuse ($M=6.47$) whereas high alcohol consumption appeared to enhance the occurrence of partner abuse ($M=7.21$).

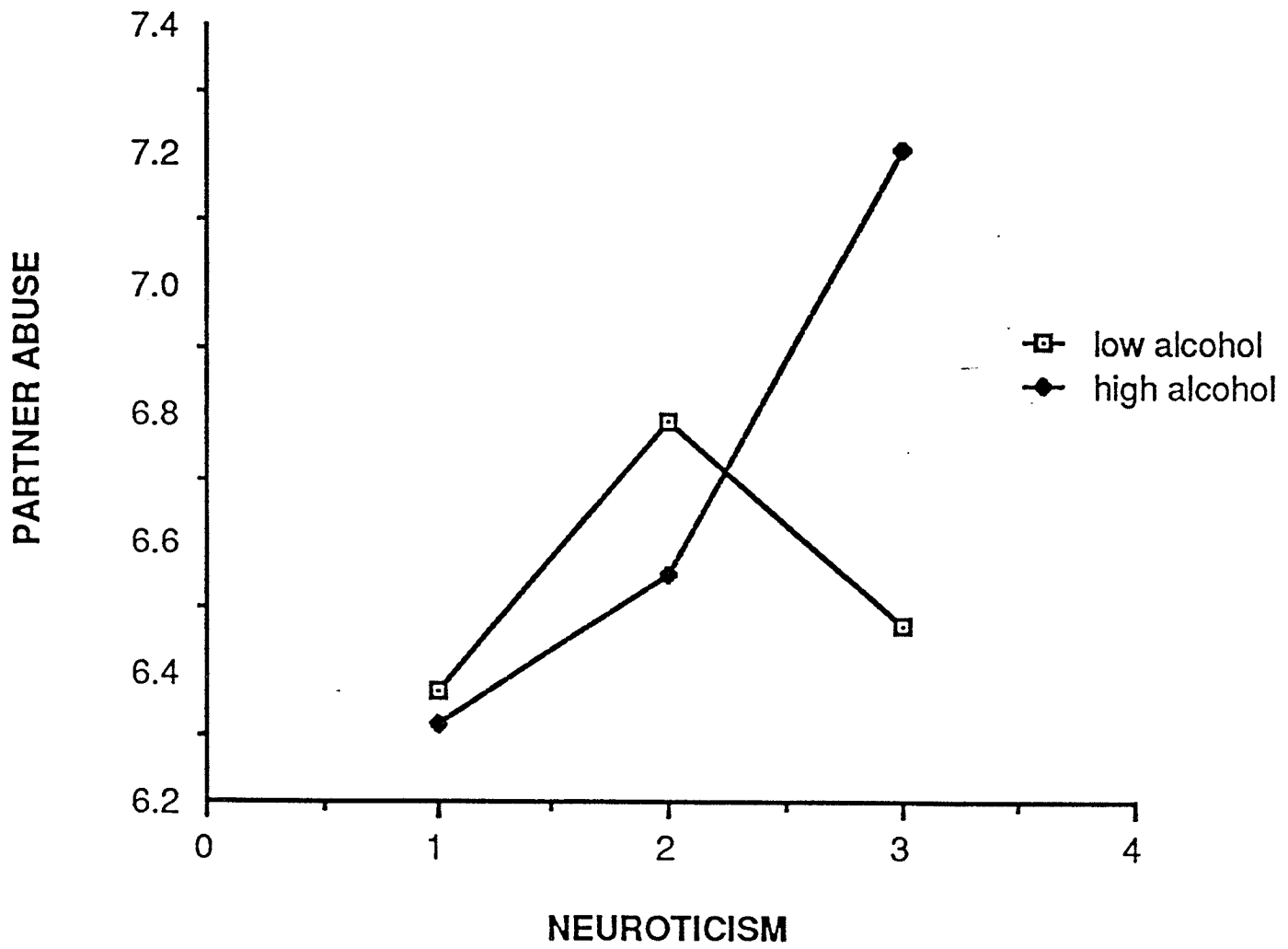


Figure 2. Partner Abuse by Neuroticism by Alcohol Consumption

TABLE 13

Partner Abuse Predicted by all Independent Measures and by
Alcohol and Personality Interactions

Predictor	Partner Abuse (CTS)		
	r	Beta	R ²
Income	-.03	.07	
ETHMAC (alcohol consumption and MacAndrew)	.25***	-.06	
Other Religions (Jewish, no religion)	.04	.50	
White	-.12*	-.14**	
ETHNEUR (alcohol consumption and Neurotic)	.39***	.31*	
Age	-.10*	-.06	
EPQP	.12*	-.04	
EPQE	.06	.06	
Alcohol	.21***	.06	
Employment Status	-.22***	-.23***	
Years of Education	-.06	-.06	
EPQL	-.17***	-.13*	
Catholic	-.005	.46	
Neurotic	.19	.04	
Ethanol	.21***	.04	
MAC	.10*	.03	
ETHL (alcohol consumption and EPQL)	-.32***	-.06	
ETHE (alcohol consumption and EPQE)	-.07	.02	
ETHP (alcohol consumption and EPQP)	.32***	.06	
Protestant	-.03	.53	

Table 18 cont'd...

Table 18 (continued)

Equation	R ²
	.29

Note: * $p < .05$

** $p < .01$

*** $p < .001$

$F(20,300) = 6.11, p < .001, \text{adj. } R^2 = .24$

Testing of the Research Propositions

Research Proposition 1: The prevalence of partner abuse will be negatively correlated with age.

A Pearson's correlation revealed that the correlation between age and partner abuse was in the expected direction but was very weak. The finding was nonsignificant ($r = -.07, n = 384, p = .06$). Research Proposition 1 was not supported.

Research Proposition 2: The prevalence of partner abuse will be negatively correlated with income.

A Pearson's correlation revealed no significant correlation between income and the occurrence of partner abuse ($r = .009, n = 377, p = .43$). Research Proposition 2 was not supported.

Research Proposition 3: The prevalence of partner abuse will be negatively correlated with employment status (i.e., full-time versus part-time versus unemployed).

A Pearson's correlation revealed a significant negative correlation between employment status and the occurrence of partner abuse such that male subjects who were unemployed were most likely to abuse their partners ($r = -.22$, $n = 331$, $p = .001$). Research Proposition 3 was supported.

Research Proposition 4: The prevalence of partner abuse will be negatively correlated with education.

A Pearson's correlation revealed no significant correlation between education and the occurrence of partner abuse ($r = -.03$, $n = 384$, $p = .23$). Research Proposition 4 was not supported.

Research Proposition 5: The prevalence of partner abuse will be positively correlated with "binge" drinking (i.e., drinking more than eight drinks per drinking session).

A Pearson's correlation revealed no significant correlation between binge drinking and the occurrence of partner abuse ($r = .03$, $n = 384$, $p = .46$). Research Proposition 5 was not supported.

Research Proposition 6: The prevalence of partner abuse will be positively correlated with alcohol dependence (i.e., as measured by an index of alcohol dependence measures).

A Pearson's correlation revealed significant positive correlations between the following alcohol dependence measures and the occurrence of partner abuse such that male subjects who scored high on alcohol dependence were more likely to abuse their partners:

1. DIS (life time diagnosis of alcohol abuse/dependency)
- ($r = .13$, $n = 384$, $p = .01$)
2. ADDS (alcohol dependence data schedule) - ($r = .21$,
 $n = 384$, $p = .01$)

Research Proposition 6 was supported.

Research Proposition 7: The prevalence of partner abuse will be positively correlated with the consumption of alcohol (i.e., the number of ounces of alcohol consumed per drinking session).

A Pearson's correlation revealed a significant positive correlation between alcohol consumption and the occurrence of partner abuse such that male subjects who drank the most were more likely to abuse their partners ($r = .17$, $n = 384$, $p = .001$). Research Proposition 7 was supported.

Research Proposition 8: The prevalence of partner abuse will be negatively correlated with self-esteem.

A Pearson's correlation revealed a significant, but weak negative correlation between self-esteem and the occurrence of partner abuse such that male subjects who scored low on

self-esteem were more likely to abuse their partners ($r = -.11$, $n = 381$, $p = .02$). Research Proposition 8 was supported.

Research Proposition 9: The prevalence of partner abuse will be negatively correlated with ego-strength.

A Pearson's correlation revealed a significant negative correlation between ego-strength and the occurrence of partner abuse such that male subjects who scored low on ego-strength were more likely to abuse their partners ($r = -.11$, $n = 380$, $p = .02$). Research Proposition 9 was supported.

Research Proposition 10: The prevalence of partner abuse will be positively correlated with anxiety.

A Pearson's correlation revealed a significant, but weak positive correlation between anxiety and the occurrence of partner abuse such that male subjects who scored high on anxiety were more likely to abuse their partners ($r = .10$, $n = 381$, $p = .03$). Research Proposition 10 was supported.

Research Proposition 11: The prevalence of partner abuse will be positively correlated with neuroticism (as measured by the EPQN).

A Pearson's correlation revealed a significant positive correlation between neuroticism and the occurrence of partner abuse such that male subjects who scored high on neuroticism were more likely to abuse their partners (r

=.20, $n = 384$, $p = .01$). Research Proposition 11 was supported.

Research Proposition 12: The prevalence of partner abuse will be positively correlated with extroversion (as measured by the EPQE).

A Pearson's correlation revealed a weak positive correlation between extroversion and the occurrence of partner abuse ($r = .09$, $n = 382$, $p = .051$). This correlation approached a level of significance; however, Research Proposition 12 was not supported.

Research Proposition 13: The prevalence of partner abuse will be positively associated with scores on the MacAndrew Scale.

A Pearson's correlation revealed a weak positive correlation between scores on the MacAndrew Scale and the occurrence of partner abuse ($r = .09$, $n = 379$, $p = .054$). This correlation also approached a level of significance; however, as with the previous finding, Research Proposition 13 was not supported.

Research Proposition 14: Alcohol consumption (i.e., the number of ounces of alcohol consumed per drinking session) will interact with the personality measures listed above in its prediction of partner abuse.

Standard multiple regression analyses involving the testing of interaction effects between alcohol consumption and personality in a full model revealed the following significant predictors of partner abuse:

1. the interaction between alcohol consumption and the neuroticism index (ETHNEUR)
2. social conformity (EPQL)
3. nonwhite racial background
4. unemployment

To the extent that the interaction between one personality measure (neuroticism index) and alcohol consumption were predictive of partner abuse, Research Proposition 14 was supported by these data.

Summary of the Results

Partner abuse and its prevalence were examined in several ways. First, the prevalence of partner abuse was explored by way of frequency data. It was found that slightly greater than one in four married and married, but previously divorced males had participated in at least one abusive incident with their current partner.

Second, correlational analyses indicated that the only demographic characteristic significantly related to partner abuse was employment status (i.e., being unemployed). Among the alcohol measures, alcohol consumption (the number of

ounces of alcohol consumed), the number of heavy drinking episodes, and the ADDS, SMAST and the DIS scales were all positively correlated with partner abuse. Analyses conducted on personality measures and partner abuse demonstrated that high scores on the EPQN and Trait Anxiety, and low scores on the EPQL, Ego Strength, and Self-Esteem were significantly correlated.

The final sets of analyses involved standard multiple regressions of the independent measures against the dependent measure. Analyses involving the main effects found that unemployment, being nonwhite, heavy alcohol consumption, high alcohol dependence, extroversion, neuroticism index and low social conformity (EPQL) were predictive of partner abuse. When the interaction effects between alcohol and personality were added to the regression equation, extroversion and neuroticism were no longer found to be predictors of partner abuse. However, the interaction between neuroticism and alcohol consumption (ETHNEUR), and the interaction between social conformity (EPQL) and alcohol consumption (ETHL) were found to be predictive of partner abuse. Furthermore, unemployment and being nonwhite were once again found to be predictors in the interactive model. Moreover, the amount of variance explained in partner abuse was enhanced by 7% by the interaction between alcohol and personality.

CHAPTER 5 - DISCUSSION

The purpose of the present study was to examine the problem of male perpetrated partner abuse in a random population sample by examining the prevalence of partner abuse and its predictors. It was hypothesized that age, income, educational status, employment status, race, alcohol abuse and personality would all be correlated with partner abuse and that the latter two variables would interact to predict partner abuse. The above variables formed the framework for the testing of the disinhibition model to be discussed in a later section.

The Prevalence of Partner Abuse

The partner abuse prevalence rate of 25.5% observed in this study of male Winnipeg residents fell within the range of partner abuse prevalence rates reported in random surveys described in the literature. However, there is reason to speculate that the prevalence rate of partner abuse found in this study may be underestimated.

At first glance it would appear that this study's prevalence rate likened itself to the rate of partner abuse (21%) found by Schulman (1981), but lower than that which was reported by Smith (1987) (34%). The closer link between

the prevalence of partner abuse findings of former study and that of the present study may be explained by the limitations in sampling to married or cohabiting persons. The latter study included subjects who were either cohabiting, currently married, or formerly married. The inclusion of the last group may account for the larger prevalence rate of partner abuse reported due to the possibility of partner abuse being a factor in the dissolution of the couple's relationship (Brinkerhoff & Lupri, 1988). In Kennedy and Dutton's (1989) study of wife assault in Alberta, the highest annual incidence of wife assault occurred among subjects who were separated, divorced and young (under 34 years of age). Thus, the prevalence rate of partner abuse in this study may have been higher had formerly married males been included in the sample.

Furthermore, the exclusion from the study of single males who may be involved in an intimate dating relationship with a woman, may also explain a lower rate of partner abuse. In Barnes, Greenwood and Sommer's (1989) study, 42.6% of college males reported having engaged in one or more forms of abuse tactics listed in the CTS. The inclusion of single males in this study may have also raised the prevalence rate of partner abuse.

Another factor impacting on the validity of the results reported herein is the degree to which the subjects may have wished to conceal their conduct and thus had presented

themselves in a more favourable light. Arias and Beach (1987) found that while victims of spousal violence did not conceal information concerning the abuse inflicted upon them, self reports regarding the initiation of physical aggression involving intimate partners were influenced by the tendency to give socially desirable responses. Thus the possibility that self-reports of partner abuse may reflect an inaccurate estimate of abuse in the population remains a concern. The results of this study which revealed a negative correlation between the EPQL and partner abuse appear to lend support to this notion. The findings indicated that individuals who were lying scored high on the Lie scale and low on partner abuse. This particular finding points to the importance of the validity of self reports in survey data. As before, this continues to be a methodological concern and should not be discounted.

Finally, one must also be aware that the present study, unlike other random surveys using the CTS, examined and reported only the more severe abuse items. Thus the less severe abuse items contained in the "reasoning" subscale were not examined. While the results of this study appear to be consistent with the results of other prevalence studies, one must consider that the prevalence rate would likely have been greater with the inclusion of the less severe abuse items.

While the previous arguments presented indicate the existence of factors which may account for an underestimation of the prevalence rate of partner abuse, replication of this study controlling for these factors would be necessary in order to determine their effects.

Partner Abuse Tactics

While all of the partner abuse tactics contained in the CTS were reflected by the responses of participants in this study, the findings indicated that the scale was skewed toward the least coercive tactics. Nevertheless, the present study found that the most common partner abuse tactic was "pushing, grabbing and shoving". This finding was consistent with the literature and was supported by research conducted by Brinkerhoff and Lupri (1988); Livingston(1986); and Straus and Gelles (1986). Brinkerhoff and Lupri (1988) noted that this form of abuse may be considered a normal part of family life and that it not be perceived as a form of abuse by family members. It may also be that while this form of conflict resolution is more serious than verbal threats, it carries with it less chance of causing physical injury when compared to hitting or punching. This form of partner abuse may be a precursor to severe abuse (that which is associated with a high risk of injury). This could explain why pushing, grabbing and shoving is more common than less coercive tactics; individuals who employ this

tactic stop short of engaging in other conflict resolution tactics that would likely result in physical injury.

Partner Abuse Risk Factors

The correlational and regression analyses conducted in this study revealed a profile of a male partner abuser that differs somewhat from that which is described in the literature. The following sections will discuss the risk factors found to be associated with male perpetrated partner abuse and point out its relationship to other research in the area.

Demographic Risk Factors

The literature examining the demographic characteristics of partner abusers indicates that while violence between intimate partners occurs at every level of society (Ontario Association of Professional Social Workers, 1987; Schulman, 1981), there are some groups of individuals who are more at risk than others. As noted in the literature review section, the male at risk for partner abuser is young, nonwhite, has achieved only high school education, has a low income and is a blue collar worker. Such a description portrays the at risk male as being a member of lower socio-economic status (Kantor & Straus, 1987).

The findings of this study only partially support the above demographic profile. Contrary to the literature, the present study did not find age, educational status, or income to be significant factors in predicting partner abuse. The only variables found to be related to the occurrence of male perpetrated abuse were being unemployed, and being nonwhite. A discussion of these variables will follow.

Unemployment. This study examined employment status in its relationship to partner abuse. This variable differs somewhat from occupational status in that employment status categorizes individuals in terms of time spent working (full-time, part-time or unemployed) while the former (occupational status) separates individuals into white collar/blue collar job categories as a function of their job description. While these variables measure different aspects of working, they share in common the economic hardships associated with having a low status job or limited income as a result of failure to maintain adequate employment. It would be inappropriate to equate unemployment with low economic-status since it is possible that persons from all types of occupations and professions may find themselves without work at some time.

Several studies lend support to the relationship between unemployment and the increased likelihood of violence (Dibble & Straus, 1980; Fitch & Papantonio, 1983; Howell &

Pugliesi, 1988; Lewis, 1987). Moreover, research by Howell and Pugliesi (1988) found unemployment more strongly increased the likelihood of violence for subjects less than 40 years of age than for older subjects. This finding suggests that age is an important factor in employment and perhaps the self-esteem attached to working is operative particularly among the younger subjects.

When considering unemployment as a risk factor for partner abuse, two explanations come to mind. First, it may be that unemployment places a financial burden on the family. With the increased stress associated with money problems also comes the increased likelihood of conflict. In some cases conflict resolution may involve violence. This line of reasoning follows the frustration-aggression theory discussed and tested in Gustafson (1985).

It would appear though that the application of the above explanation of partner abuse in this study is unlikely in view of other research findings. For example, this study did not find income to be a significant correlate of partner abuse. Therefore, it does not seem likely that financial problems as a function of unemployment would play a large role in the occurrence of partner abuse. However, analyses involving the interaction of employment status and income would be necessary in order to test its relationship to partner abuse. Furthermore, without a measure of stress, it is difficult to comment on the role of stress in the occurrence of partner abuse in this study.

A second interpretation of the role of unemployment in partner abuse involves the notion of the removal of the role of worker/breadwinner with which an individual identifies strongly. The loss of job means large amounts of time left unoccupied. Although loss of income may contribute to the problems associated with being unemployed, the emphasis in this interpretation is on the loss of role and the resulting unoccupied time associated with not working. The results of this study appear to support this argument particularly in light of the findings that low self-esteem and low ego-strength were both significantly correlated with partner abuse. As before, analyses examining the interactional effects between the personality variables and employment would be necessary in order to test their relationship to partner abuse.

Race. This study found that being non-white was related to partner abuse. However, this subsample of married males was found to be almost 93% white. While there is support for this finding in the literature, one must be cautious about making generalizations concerning this finding in this sample. Research comparing matched samples of white/nonwhite groups would be necessary to study the relationship of race on partner abuse.

Summary. The analyses performed on this study's demographic data presents the male partner abuser somewhat differently than that which is described in the literature.

These data define the male abuser as coming from any level of society, and of any age, religion and educational background. However, the one variable that appeared to set the partner abuser apart from others was unemployment. However, without analysing the data on occupational status it is impossible to say with any degree of confidence whether this study brings into question the role of low socio-economic status (SES) as a risk factor. Nevertheless, it is reasonable to speculate that since neither income or educational status were found to be related to partner abuse, it is unlikely that low SES would be a risk factor in its occurrence.

Alcohol Risk Factors

The examination of alcohol abuse and its relationship to partner abuse revealed several interesting findings. First, while alcohol consumption, heavy drinking episodes (binging), alcohol dependence and alcoholism were all found to be positively correlated with the occurrence of partner abuse, whether one ever had a binging episode was not found to be a significant correlate. This finding would suggest that the occasional "bender" does not place an individual at risk for partner abuse. Because chronic binging, alcohol dependence and alcoholism were positively correlated with partner abuse, it would appear that the male partner abuser is not just a weekend drinker, but more likely an alcoholic.

While alcohol consumption and its relationship to partner abuse is well supported by the literature, research on family violence provides mixed support for the suggestion that the partner abuser is an alcoholic. On the one hand, there is a body of literature which provides evidence for abuse occurring among moderate drinkers where drinking is a precursor to violence; however, there is another body of literature which likewise provides evidence for partner abuse occurring most frequently among those with a lifestyle pattern of chronic drinking.

In support of the position that partner abuse is related to moderate drinking, Frieze and Schafer (1984) found that a factor linking alcohol consumption and violence was fighting while drinking; however, neither drinking nor the form of violence were found to be excessive. Similarly Hamilton and Collins (1981) suggested that the highest rates of violence occurred among moderate drinkers because for some men high alcohol consumption appears to undermine the capacity for violence. While there may be some basis for these findings in theory, an underlying assumption of these findings is that the violent episode occurred following intoxication.

The studies which follow support the position that the link between partner abuse and alcohol consumption occurs via the alcoholic lifestyle. Hasselt, Morrison and Bellack (1985) assessed alcohol use in couples characterized by wife abuse and compared them with maritally discordant but non-

violent couples and satisfactorily married couples. Their study revealed that physically abusive males scored significantly higher on the MAST. Furthermore, the MAST scores for the physically abusive males were well above the cut-off score which indicated alcoholism. While Kantor and Straus (1987) did not use an alcohol dependence measure in their study investigating the relationship between partner abuse and alcohol and occupational status, they found strong support for a linear association between alcohol consumption and partner abuse. Their findings revealed that the percentage of violent husbands rose monotonically from 6.8% for abstainers to 19.2% for chronic bingers.

The results of these studies lent partial support for the findings of the present study. The breakdown procedure examining the interaction effect between alcohol consumption and neuroticism in the occurrence of partner abuse found a linear relationship among high alcohol consumers. Furthermore, this procedure illustrated the paradoxical effects of alcohol consumption among high scoring neurotics whereby low alcohol consumption was found to moderate partner abuse and high alcohol consumption enhanced it.

Upon examination of the regression analyses performed, it became clear that while alcohol consumption and alcoholism were found to be significantly related to partner abuse in the main effects model, these variables lost their salience in the interactive model. In other words, the overall

regression showed that alcohol use or alcoholism by themselves were not significant. It may be that other variables in this model have overlapped with these measures and in doing so have diminished the amount of variance explained by them. Improvement of the alcohol measures would be valuable in order to ensure an accurate assessment of their contributions when tested in this model. Moreover, these findings suggest that when alcohol use or dependence interact with certain dimensions of personality, the likelihood for the occurrence of violence between intimate partners is increased. These findings may help explain the imperfect relationship which exists between alcohol consumption and partner abuse when violence occurs among some alcoholics and not in others. A discussion of the relationship between personality and alcohol abuse in characterizing partner abuse will follow in the next section.

Personality Risk Factors

The results of the correlational analyses examining the relationship between personality measures and the occurrence of partner abuse provided the following psychological profile of the male partner abuser: a man who is neurotic, anxious, suffers from low self-esteem and poor self-concept, and demonstrates low social conformity.

According to Eysenck (1965) and Buss and Plomin (1984) neurotics are individuals who are emotionally unstable and possess an unusually high anxiety level that is disproportionate to the realities of the situation. Moreover, persons high on neuroticism are thought to have lower thresholds of activity in the visceral brain and have greater responsivity of the sympathetic nervous system. As a result, neurotics are innately more reactive and typically overreact to even mild forms of stimulation (Eysenck & Eysenck, 1985). This greater responsivity of the sympathetic nervous system is most apparent under stressful conditions. Consequently, neurotics experience high levels of anxiety in need of reduction through various techniques. Quite simply, neurotics can be described as highly emotional people.

When the tendency to overreact and the need for anxiety reduction are considered together, the role of neuroticism in the occurrence of partner abuse may be more readily understood. It can be speculated that the normal stresses related to the day-to-day activities of family life may be more than what is tolerable for some individuals high on the dimension of neuroticism. As a result, alcohol abuse and violence may be coping methods used to reduce the anxiety associated with stressful events. It can be speculated that violent conduct has its roots in the male socialization process in which emotionality is expressed through anger (Buss & Plomin, 1984).

The correlation between neuroticism and partner abuse was supported by the research findings of Robertson, Taylor and Gunn (1987) who investigated the relationship between cognitive function and violence. While their study failed to find evidence of cortical processes in the occurrence of violence, they did find significantly higher levels of neurotic symptoms among violent subjects compared to non-violent ones.

Low self-esteem was another correlate of partner abuse commonly found in this study and in the family violence literature. As noted in the literature review, self-esteem is a personality characteristic which is consistently linked to family violence either directly or through the interaction with other variables. Wodarski (1987) discussed the relationship between adult abuse behavior and low self-esteem. Goldstein and Rosenbaum (1985) likewise suggested an association between wife abuse and low self-esteem. Studies investigating the effects of treatment programs for male abusers have also cited enhancing self-esteem as a program goal (Hale, Zimostad, Duckworth & Nicholas, 1988; Kriner & Waldron, 1988; and Saunders, 1984).

As was the case with low self-esteem, this study and other research have found low ego-strength to be linked to the occurrence of violence within the family, especially between intimate partners. In a paper discussing the personality characteristics of men arrested for spouse abuse

(Waldo, 1987), low ego-strength was noted as a dimension of personality thought to be underlying the dynamics associated with the formation of an abusive relationship in denial of problems and resistance to change.

The personality characteristics just discussed have also been consistently linked together in family violence research. For example, Gondolf (1989) described male partner abusers as having low impulse control, low tolerance for stress, low self-esteem and poor communication skills. As previously noted, based on support from the literature as well as the high intercorrelations found in this study, their inclusion in an index was considered an appropriate means of measuring global neuroticism and allowed for its subsequent testing in regression analyses.

As with the alcohol abuse measures, the regression analyses revealed some interesting findings relating to personality measures. The results of the main effects and interactional effects models were consistent in that they found the neuroticism index (and the interaction between the neuroticism index and alcohol consumption) and low social conformity (EPQL) to be significantly related to partner abuse. The finding that the neuroticism index and its composite variables of low self-esteem and ego-strength and high anxiety were found to be correlates of partner abuse is well supported in the literature. Furthermore, the results of the breakdown procedure which assessed the interaction

effect between alcohol consumption and neuroticism suggested that individuals scoring high in neuroticism were the most vulnerable to the effects of alcohol.

Another finding of interest involves the EPQL as a significant correlate of partner abuse. This finding lent itself to two separate yet related interpretations. First, the EPQL scale was primarily intended as a validity check; to determine the extent to which subjects were responding truthfully. The results of this study would suggest that when the EPQL scores of the present sample ($M=9.17$, $SD=4.53$) were compared to those of a standardized sample ($M=6.80$, $SD=4.14$) (Eysenck & Eysenck, 1975), it would appear that the respondents may have attempted to dissimulate. According to Eysenck and Eysenck (1975), a high negative correlation (.5) between the EPQN and the EPQL would also be indicative of faking. However, this study revealed only a modest negative correlation ($-.18$) between these personality measures suggesting that this sample's responses were likely valid.

Second, by virtue of the scale's ability to assess the extent to which respondents attempt to present themselves in a favourable manner, the EPQL is also a measure of social conformity. The analyses conducted demonstrated that males who scored high on partner abuse also scored low in social conformity. In light of recent attention given to the issue of family violence, it is reasonable to speculate that for those willing to acknowledge their involvement in a form of

behavior which is frowned upon by society, there exists little regard for societal norms. This suggestion is consistent with Hale, Zimostad, Duckworth and Nicholas (1988), who found that adult males who had been violent toward their partners demonstrated a lack of respect for social standards.

Noteworthy of discussion is the role of extroversion and its relationship to partner abuse in this study. While this dimension of personality was found to be significantly related to partner abuse when tested in the personality main effects model, it failed to show any significant relationship when tested in the interactive model. In attempting to interpret this finding, it would appear that extroversion's salience was affected by other variables, specifically, age and alcohol consumption.

Finally, when demographic variables, alcohol abuse measures, and personality measures were tested in the interaction model, it was found that the interaction between the neuroticism index and alcohol consumption was significantly related to partner abuse. Moreover, the amount of variance explained by partner abuse was enhanced by the interactive model. The results of this study lent support for the disinhibition theory model tested in this study. A detailed discussion will follow.

The Modified Disinhibition Theory

The modified disinhibition theory which guided this research hypothesized that alcohol consumption would interact with personality in the prediction of partner abuse. To the extent that the overall regression equation testing the interactive model demonstrated that a positive interaction between alcohol consumption and global neuroticism (neuroticism index) was related to partner abuse and explained an additional seven percent of the variance in its occurrence (when compared to the main effects model), support was provided for this theory.

The findings indicate that alcohol consumption lost its salience as a significant variable in explaining the occurrence of partner abuse. However, when individuals who are at risk for partner abuse by virtue of their personality makeup (high anxiety and neuroticism, and low self-esteem and ego-strength) engaged in the high intake of alcohol, the amount of variance explained by partner abuse was enhanced.

According to the theory, the consumption of alcohol disinhibits one's tendency toward violence in individuals who demonstrate vulnerability via their personalities. It may be that under conditions of high vulnerability (i.e., high alcohol consumption and high neuroticism) violent behavior is more likely to occur. This may be explained in terms of the physiology of individuals with neurotic

personality types. As noted previously, the visceral system, that which controls emotionality is thought to be particularly sensitive among neurotics. When alcohol is ingested in large quantities, the initial increase in activity which is associated with violent behavior is thought to be due to inhibitions being depressed first (Rosenthal & Seligman, 1984). The results of this study suggests that there appears to be a critical level of alcohol consumption above which the risk of violent behavior is increased.

The role of personality in the occurrence of partner abuse may also help to explain the imperfect relationship between alcohol consumption and violence, why some alcoholics abuse their partners while others do not. In keeping with the theory, those who are not predisposed toward violence by virtue of their personalities will not behave so under the influence of alcohol. Conversely, the opposite is true for individuals with highly vulnerable personalities.

As noted earlier, this theory does not provide a complete explanation of partner abuse. While the complete model explained 24 percent of the variance in the occurrence of partner abuse, the remaining 76 percent is due to measurement error, higher order interactions not considered and other factors such as family of origin not tested by this theory.

Implications

The results of this study have demonstrated that the problem of male perpetrated partner abuse is multi-faceted and involves the interaction between personality and alcohol consumption in its prediction.

The high prevalence of partner abuse found in this study is particularly alarming especially in view of the study's focus on the most severe forms of abuse. Because this study confined itself to the measurement of male perpetrated abuse, one need only speculate about the abuse rates of other forms of family violence found in this Winnipeg sample. Depending upon the vulnerability of the victims (children, husbands or old people), the abuse rates in those groups may be as high or higher than what was reported in this study.

The limited capacity of the demographic variables to predict partner abuse has implications for future study as well as the treatment of abusers, their partners, and their families. The findings of this study revealed that aside from unemployment, the male partner abuser is not identifiable by age, education, income or religion. As noted, this finding was contrary to the findings of U.S. national surveys which found the male partner abuser to be represented by membership in the lower SES. It would appear that perhaps Canadian and U.S. sample should not be equated.

It may be that the medical and social services available in Canada have produced a more homogenous population.

An alternate explanation for the lack of support for demographic variables may simply reflect the inadequacies of the sample. Due to the sampling techniques, the homeless, new immigrants and the institutionalized were excluded. Future research should consider ways of overcoming these inadequacies in the sample and be alerted as well to the possibility that Canada and the U.S. represent two very distinct populations based on their individual resources.

The interaction between personality and alcohol consumption in characterizing partner abuse suggests that when planning prevention and treatment strategies for partner abusers, attention should be paid to the complex nature of this problem. Program orientations should be geared toward all members of society, and not just those of the lower class. The problems associated with alcohol dependence and personality factors cannot be underestimated nor overlooked. Programs for batterers should include alcohol treatment as well as sessions which focus on raising self-esteem, and teach the appropriate management of anger and stress. Efforts should be made to integrate treatment goals into the family setting. Only then can the problem of partner abuse be addressed within the context of family interactions.

Finally, partner abuse is not just limited to the interaction of two people. The problems associated with violent behavior between intimates go beyond the participants. The witnessing of or participation in violent episodes has immediate and long-term consequences for the children of partner abusers. Furthermore, families experiencing violence have attracted the attention of various communities including medicine, social services and criminal justice. Thus, the problems associated with violence between two persons can no longer be considered a private issue.

Suggestions for Future Research

This study has supported some research findings while refuting others. Much of the strength of this study lies in the nature of its sample. The use of a random sample allowed for the comparisons of results to be made with other studies conducting random urban population surveys. However, inasmuch as the sampling technique utilized in this study attempted to ensure a sample which would be representative of the population of Winnipeg, it excluded individuals who were institutionalized, transient or did not hold a MHSC number.

Furthermore, one needs to be alerted to the fact that the subsample from which abusers were selected included only those who were married and married but previously divorced

males. Individuals who were single, widowed or divorced, but not remarried were excluded from the analyses conducted on the partner abuse items because CTS data were not gathered from them. The study's failure to find age as a significant predictor may be largely due to restricting the range in age variable via the exclusion of single people who were most likely to be found at its lower end. Future research should examine the partner abuse behavior of these groups as well as explore the possibility that Canadian and U.S. samples may be different.

This study was unique in that it examined the problem of partner abuse through the analysis of socio-demographic and psychological variables. Previous research utilizing random population surveys have typically been conducted by sociologists and have focused almost exclusively on socio-demographic factors. On the other hand, studies which have examined psychological variables have been limited to small clinical samples. This study has built upon earlier ones by extending its focus to include the study of individual differences. The findings of this study suggest that psychological variables are indeed important and should not be underestimated in the role they play in the occurrence of family violence. Future research needs to build upon the findings of this study through its replication and testing of causal models.

The CTS was a worthy instrument because it provided an efficient means of indexing abuse behaviors without the necessity of a long questionnaire which is time consuming and costly. As well, it allowed for comparisons to be made with other studies which utilized it. Nevertheless, the use of this scale was not without its shortcomings. As noted, while the CTS provided an index of abuse behaviors, its brevity did not allow for the inclusion of many other forms of abuse tactics. In addition, the study's further limiting of the abuse items to include only the most severe tactics resulted in what may be speculated to be a skewed view of partner abuse. Future research should include the full range of scale items.

Another limitation of the CTS was its failure to relate the abuse tactics to motivations or consequences. Without this information one cannot assess the context in which the behavior occurred. It is therefore difficult to determine whether episodes of abuse had occurred in retaliation to an attack by the other partner or as part of mutual violence. Furthermore, the consequences of abuse may range from no injuries to injuries requiring medical care. Future research should consider attempting to link the abuse tactics to the context in which the event occurred.

This study reported the prevalence of partner abuse and not its incidence. In doing so, it was difficult to discern whether the abuse reported had taken place within the past

year or occurred many years before. Abusive behavior occurring 25 years ago as an isolated incident cannot be regarded in the same way as abusive behavior which is ongoing. One must therefore consider the validity of judging the former as an example of partner abuse. Future research should be alerted to this problem and consider examining both the incidence and prevalence of partner abuse allowing for comparisons in the same sample.

Finally, while this study found alcohol consumption to be related to partner abuse, it was impossible to determine whether drinking preceded or was involved in the occurrence of an abusive incident. In failing to link alcohol consumption to a partner abuse episode, this study could not aid in resolving the issue of alcohol's direct involvement in incidents of family violence. Future research should address the issue of the timing of violent episodes relative to consumption of alcohol and consider examining the development of the relationship between drinking and violence through a longitudinal study.

Results of this study should alert us to the importance of examining socio-demographic variables as well as individual differences as they relate to the occurrence of partner abuse. The use of a random population sample used in this research has made it possible to study these variables in a nonclinical sample. As well, comparisons with other similarly based random surveys were able to be

made. While this study has begun to uncover some of the issues surrounding the problem of partner abuse, its findings have also raised many other questions yet to be answered.

Conclusions

The prevalence rate of partner abuse (25.5%) found in this study attests to the seriousness attached to this form of family violence. Personality factors, especially those interacting with alcohol consumption, were also shown to play an important role in the occurrence of partner abuse. It is therefore imperative that efforts be made to alter maladaptive interactions between intimates by addressing the individual needs and concerns of the abuser and his partner.

Treatment programs for male partner abusers should consider the following as important elements:

1. teaching stress management and the appropriate means of conflict resolution,
2. understanding the role of cultural norms in family life,
3. teaching communication skills,
4. raising self-esteem,
5. helping family members secure job placements,
6. treating drug and alcohol abuse, and
7. providing therapy for couples and their families.

Programs following this format go beyond the treatment of battering and include ways of improving family functioning. In so doing, there is hope for the future of other family members as well as for those of generations to come.

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Appendix A
LETTER OF INTRODUCTION



THE UNIVERSITY OF MANITOBA

WINNIPEG HEALTH AND DRINKING SURVEY
FACULTY OF HUMAN ECOLOGY
Department of Family Studies

Room 313D
Human Ecology Building
Winnipeg, Manitoba
Canada R3T 2N2

(204) 474-9430

Dear

The University of Manitoba, with the support of Health and Welfare Canada, is conducting a study on living patterns and alcohol use by people in Manitoba. Your name has been randomly chosen from all of the residents of the city.

In a few days a caller from the "Winnipeg Health & Drinking Survey" will telephone you, will explain the project in more detail, and will request to interview you. We hope that you will agree to participate. If you decide to participate, your answers are kept confidential, and the results are only reported in statistical form.

Alcohol use is an important factor which affects health in Canada. The federal government has made a large investment in Manitoba for this project, in an effort to get an accurate view of the attitudes and behavior of Manitobans towards drinking. In order to get this accurate view we have to question a broadly representative sample of the population. For the project to be successful it is important that a high percentage of the people we contact agree to participate. It doesn't matter whether you drink or don't drink your participation is important to provide us with the most accurate picture possible. If you have any questions about the research please give us a call.

Sincerely,

David Patton, M.A.
Project Manager
Winnipeg Health & Drinking Survey
Faculty of Human Ecology

Gordon Barnes, Ph.D.
Professor
Department of Family Studies
Faculty of Human Ecology

Appendix B
INDEPENDENT MEASURES

Part 1: Demographics Information

TO COMPLETE OUR BACKGROUND INFORMATION WE NEED TO ASK YOU SOME QUESTIONS ABOUT YOURSELF.

[INTERVIEWER: CODE MALE OR FEMALE] M[]

F[]

Could you please tell me your date of birth? ____ / ____ / ____ .
(date) (month) (year)

Please describe the following characteristics about yourself.

1. Current Marital Status:

[INTERVIEWER: IF THE RESPONDENT IS MARRIED, ASK IF THEY HAVE BEEN PREVIOUSLY DIVORCED?]

Single []

Married or Equivalent []

Widowed []

Divorced or Separated []

Married, but previously
divorced []

2. The following questions are about employment.

First, which of the categories on this card best describes what you are now doing?

[INTERVIEWER: USE RESPONDENT CARD CALLED EMPLOYMENT AND CHECK

ONLY ONE: IF RESPONDENT USES MORE THAN ONE WRITE IN THE MARGIN
ON THE RIGHT]

Working full-time	[]
Working part-time	[]
Unemployed & looking for work	[]
Full-time student	[]
Part-time student	[]
Homemaker	[]
Retired	[]
Other (specify)	[]

In your most recent job what is/was your title?

Please describe the main duties or responsibilities of this
position?

3. Educational Status:

What is the highest grade you attended or degree you received?

Some Grade School	[]
Grade School Completed	[]
Some High School	[]
High School Completed	[]
Some College or a Technical Diploma	[]
University Graduate	[]

Some Post-Graduate Work []
 Master's Degree or Doctorate []

4. What is your religious preference?

Catholic []
 Protestant (Denomination) []
 Jewish []
 Other (specify)----- []
 None []

5. What was your parents' religion?

	Mother's	Father's
Catholic	[]	[]
Protestant (Denomination)	[]	[]
Jewish	[]	[]
Other (specify)-----	[]	[]
None	[]	[]

6. When you were growing up, what was the language used most often in your home?

English []
 French []
 Ukrainian []
 German []
 Other (specify)_____ []

7. In what country were you born?

Specify _____

8. To which ethnic or cultural group do you feel you belong?

Specify _____

9. What racial category would you consider yourself?

White []

Black []

Asian []

Native []

Other (Specify) _____ []

10. When your mother was growing up, what was the language used most often in her family's home?

English []

French []

Ukrainian []

German []

Other (Specify) _____ []

11. In what country was your mother born?

Specify _____

12. To which ethnic or cultural group does your mother belong?
(Aside from Canadian)

Specify _____

13. When your father was growing up, what was the language used most often in his family's home?

English []
 French []
 Ukrainian []
 German []
 Other (Specify) _____ []

14. In what country was your father born?

Specify _____

15. To which ethnic or cultural group does your father belong?
(Aside from Canadian)

Specify _____

16. What was the size of the place where you lived the longest
before you were 16?

In the country on a farm []
 In the country but not on a farm []
 Town of less than 5,000 people or on a
 reserve []
 City of 5,000 to 24,999 people []
 City of 25,000 to 99,999 people []
 City of 100,000 to 499,999 people []
 City of 500,000 to more people []
 Can't guess (Give the name of place) []

17. Please describe the other members of your household besides

yourself.

Relationship to yourself:	Age	Gender		EMPLOYMENT		
		Male	Female	Full-time	Part-time	Not Employed
1. _____	___	[]	[]	[]	[]	[]
2. _____	___	[]	[]	[]	[]	[]
3. _____	___	[]	[]	[]	[]	[]
4. _____	___	[]	[]	[]	[]	[]
5. _____	___	[]	[]	[]	[]	[]
6. _____	___	[]	[]	[]	[]	[]
7. _____	___	[]	[]	[]	[]	[]
8. _____	___	[]	[]	[]	[]	[]
9. _____	___	[]	[]	[]	[]	[]
10. _____	___	[]	[]	[]	[]	[]

18. So that we can compare this study with the whole population by broad income groups, indicate your income for the past year (that is, total income before taxes, including wages, welfare income, farm income, interest dividends, etc.) of all members of the family presently residing in this household by checking one of these income categories.

- Under \$10,000 []
- \$10,000 - \$20,000 []
- \$20,000 - \$35,000 []
- \$35,000 - \$50,000 []

- over \$50,000 []
- Don't Know []

19. About how many years have you lived in your present home?

Number of years _____

Number of months _____

20. [INTERVIEWER: IF THE RESPONDENT HAS LIVED IN THE PRESENT HOME LESS THAN 5 YEARS, ASK: "How many times have you moved in the last five years?"]

Number of times _____

Screening for alcohol consumption:

1. Did you yourself drink any alcohol in the last 12 months?
(Any wine, beer, or liquor - even a taste?)

YES []

NO []

If NO,

2. Was there ever a time when you drank wine, beer, liquor or anything containing alcohol even once?

YES []

NO, I have never drank alcohol []

Part 2: Volume Variability Index (VVI)

The next few questions ask about your use of beer, wine, and liquor over the past year.

1. First of all, how often do you usually have wine?

- | | |
|--|-----|
| Three or more times a day | [] |
| Two times a day | [] |
| Once a day | [] |
| Nearly every day | [] |
| Three or four times a week | [] |
| Once or twice a week | [] |
| One to three times a month | [] |
| Less than once a month but at
least once a year | [] |
| Less than once a year | [] |
| I have never had wine | [] |

2. Now, think of all the times you had wine recently. When you drink wine, how many glasses do you usually have?

- | | |
|-----------------------|-----|
| One or two glasses | [] |
| Three or four glasses | [] |
| Five or six glasses | [] |
| More than six glasses | [] |

3. About how many times during the past 12 months did you have eight or more glasses of wine at a sitting?

- | | |
|---------------------------|-----|
| Nearly every day | [] |
| One to three times a week | [] |

- One to three times a month []
- Less than once a month []
- Never []

4. How often do you usually have beer?

- Three or more times a day []
- Two times a day []
- Once a day []
- Nearly every day []
- Three or four times a week []
- Once or twice a week []
- One to three times a month []
- Less than once a month but at
least once a year []
- Less than once a year []
- I have never had beer []

5. Now, think of all the times you have had beer recently.

When you drink beer, how many glasses do you usually have?

- One or two glasses []
- Three or four glasses []
- Five or six glasses []
- More than six glasses []

6. About how many times during the past 12 months did you have eight or more glasses of beer at a sitting?

- Nearly every day []
- One to three times a week []

- One to three times a month
- Less than once a month
- Never

7. How often do you usually have drinks containing liquor (such as Martinis, Manhattans, or straight drinks)?

- Three or more times a day
- Two times a day
- Once a day
- Nearly every day
- Three or four times a week
- Once or twice a week
- One to three times a month
- Less than once a month but a
least once a year
- Less than once a year
- I have never had liquor

8. Now, think of all the times you have had liquor recently. When you drink liquor, how many drinks do you usually have?

- One or two drinks
- Three or four drinks
- Five or six drinks
- More than six drinks

9. About how many times during the past 12 months did you have eight or more drinks of liquor at a sitting?

- Nearly every day

One to three times a week	[]
One to three times a month	[]
Less than once a month	[]
Never	[]

Part 3: Michigan Alcoholism Screening Test Short Form
(SMAST)

Here are some more questions about experiences you may have had because of your drinking. This time indicate your response to each statement by a YES or NO.

yes []

no []

1. Do you feel you are a normal drinker? (By normal we mean you drink less than or as much as most other people.)
2. Have you ever gotten into trouble at work because of drinking?
3. Have you had delirium tremens (DTs), severe shaking, heard voices, or seen things that weren't there after heavy drinking?
4. Do your friends or relatives think you are a normal drinker?
5. Have you ever attended a meeting of Alcoholics Anonymous?
6. Have you ever lost boy/girl friends because of your drinking?
7. Have you neglected your obligations, your family, or your work for two or more days in a row because you were drinking?
8. Have you ever gone to anyone for help about your drinking?

9. Have you ever been in a hospital because of your drinking?
10. Does your wife, husband, a parent or other near relative ever worry or complain about your drinking?
11. Do you ever feel guilty about your drinking?
12. Are you able to stop drinking when you want?
13. Has your drinking ever created problems between you and your wife, husband, a parent, or other near relative?

Part 4: Alcohol Dependence Data Schedule (ADDS)

The following questions cover a wide range of topics to do with your current drinking patterns. Use the response cards to indicate your answer to the question.

never []

sometimes []

often []

nearly always []

1. Do you find difficulty in getting the thought of drink out of your mind?
2. Is getting drunk more important than your next meal?
3. Do you plan your day around when or where you can drink?
4. Do you drink in the morning, afternoon and evening? (i.e. during the same day).
5. Do you drink for the effect of alcohol without caring what the drink is?
6. Do you drink as much as you want irrespective of what you are doing the next day?
7. Given that many problems might be caused by alcohol, do you still drink too much?

8. Do you know that you won't be able to stop drinking once you start?
9. Do you try to control your drinking by giving it up completely for days or weeks at a time?
10. The morning after a heavy drinking session, do you need your first drink to get yourself going?
11. The morning after a heavy drinking session, do you wake up with a definite shakiness of your hands?
12. After a heavy drinking session, do you wake up and retch or vomit?
13. The morning after a heavy drinking session, do you go out of your way to avoid people.
14. After a heavy drinking session, do you see frightening things that you later realize were imaginary?
15. Do you go drinking and next day find you have forgotten what happened the night before?

Part 5: Diagnostic Interview Schedule (DIS III R)

I am going to ask you more questions about drinking, these questions are related to things that might have happened to you in the past.

never []

sometimes []

often []

nearly always []

1. Have you ever had fits or seizures after stopping or cutting down on drinking?
2. Have you ever taken a drink to keep from having withdrawal symptoms or to make them go away?
3. Have you ever gone on binges or benders where you keep drinking for a couple of days or more without sobering up?
4. When you went on these binges or benders, did you neglect some of your usual responsibilities then?
5. Did you do that several times or go on a binge that lasted a month or more?
6. Did you ever get tolerant to alcohol, that is you needed to drink a lot more in order to get an effect, or found that you could no longer get high on the amount you used to drink?

7. After you have been drinking for a while, did you find that you began to be able to drink a lot more before you would get drunk (before your speech got thick or you were unsteady on your feet)?
8. Did your ability to drink without feeling it last for a month or more?
9. Have there been many days when you drank much more than you expected to when you began, or have you often continued drinking for more days in a row than you intended to?
10. Have you more than once wanted to stop drinking but couldn't?
11. Some people try to control their drinking by making rules, like not drinking before 5 o'clock or never drinking alone. Have you ever made rules like that for yourself?
12. Did you make these rules because you were having trouble limiting the amount you were drinking?
13. Did you try to follow those rules for a month or longer or make rules for yourself several times?
14. Has there ever been a period when you spent so much time drinking alcohol or getting over its effects that you had little time for anything else?
15. Did the period when you spent a lot of time drinking last a month or longer?
16. Have ever given up or greatly reduced important activities

in order to drink ___ like sports, work, or associating with friends or relatives?

17. Did you give up or cut down on activities to drink for a month or more, or several times?

18. Has your drinking or being hung over often kept you from working or taking care of your children?

19. Have you often worked or taken care of children at a time when you had drunk enough alcohol to make your speech thick or to make you unsteady on your feet?

20. How old were you when you first had any wine, beer, or other alcohol at least once a month (for 6 months or more)?

21. What is the largest number of drinks that you've ever had in one day?

_____ yrs ago or _____ months ago

22. When did you last have as much as 20 drinks in one day?

_____ yrs ago

_____ months ago

_____ within the past month

23. Has there ever been a period of two weeks when every day you were drinking at least 7 drinks ---- that could include beers, glasses of wine, or drinks of any kind?

Yes []

No []

24. When did you first have a period of two weeks when you drank at least 7 drinks every day?

_____ yrs ago or _____ months ago

25. When did you last have a period of two weeks when you drank at least 7 drinks every day?

_____ yrs ago or _____ months ago

26. Has there ever been a couple of months or more when at least one evening a week you drank 7 or more drinks or bottles of beer or glasses of wine?

Yes []

No []

27. When was the first time that at least one evening a week you drank 7 or more drinks?

_____ yrs ago or _____ months ago

28. When was the last time that at least one evening a week you drank 7 or more drinks?

_____ yrs ago or _____ months ago

Part 6: Rosenberg Self-esteem Scale

Please read the following statements and indicate how much you agree or disagree with each statement by placing a tick in the appropriate box.

Strongly Agree	Agree	Disagree	Strongly Disagree
[]	[]	[]	[]

1. I feel that I'm a person of worth, at least on equal plane with others.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all.

Part 7: Trait Anxiety Scale

A number of statements which people have used to describe themselves are given below. Read each statement and place a tick in the box to indicate how you generally feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

Almost			Almost
Never	Sometimes	Often	Always
[]	[]	[]	[]

1. I feel pleasant.
2. I tire quickly.
3. I feel like crying.
4. I wish I could be as happy as others seem to be.
5. I am losing out because I can't make up my mind soon enough.
6. I feel rested.
7. I am "calm, cool and collected".
8. I feel that difficulties are piling up so that I cannot overcome them.
9. I worry too much over something that doesn't really matter.

10. I am happy.
11. I am inclined to take things hard.
12. I lack self-confidence.
13. I feel secure.
14. I try to avoid facing a crisis or difficulty.
15. I feel blue.
16. I am content.
17. Some unimportant thoughts run through my head and bother me.
18. I take disappointments so keenly that I can't put them out of my mind.
19. I am a steady person.
20. I get in a state of tension or turmoil as I think over my recent concerns and interests.

Part 8: Eysenck Personality Questionnaire (EPQ)

Please answer each question by putting a tick in the box under the "Yes" or the "No" following the question. Work quickly and do not think too long about the exact meaning of the questions.

Yes

No

[]

[]

1. Do you have many hobbies?
2. Do you stop to think things over before doing things?
3. Does your mood often go up and down?
4. Have you ever taken the praise for something you knew someone else had really done?
5. Do you take much notice of what people think?
6. Are you a talkative person?
7. Would being in debt worry you?
8. Do you feel 'just miserable' for no reason?
9. Do you give money to charities?
10. Were you ever greedy by helping yourself to more than your share of anything?
11. Are you rather lively?

12. Would it upset you alot to see a child or an animal suffer?
13. Do you often worry about things you should not have done or said?
14. Do you dislike people who don't know how to behave themselves?
15. If you say you will do something, do you always keep your promise no matter how inconvenient it might be?
16. Can you usually let yourself go and enjoy yourself at a lively party?
17. Are you an irritable person?
18. Should people always respect the law?
19. Have you ever blamed someone for doing something you knew was really your fault?
20. Do you enjoy meeting new people?
21. Are good manners very important?
22. Are your feelings easily hurt?
23. Are all your habits good and desireable ones?
24. Do you tend to keep in the background at social occasions?
25. Would you take drugs which may have strange and dangerous effects
26. Do you often feel 'fed-up'?
27. Have you ever taken anything (even a pin or a button) that

belonged to someone else?

28. Do you like going out a lot?
29. Do you prefer to go your own way rather than act by the rules?
30. Do you enjoy hurting people you love?
31. Are you often troubled by feelings of guilt?
32. Do you sometimes talk about things you know nothing about?
33. Do you prefer reading to meeting people?
34. Do you have enemies you want to harm?
35. Would you call yourself a nervous person?
36. Do you have many friends?
37. Do you enjoy practical jokes that sometimes really hurt people?
38. Are you a worrier?
39. As a child did you do as you were told immediately without grumbling?
40. Would you call yourself happy-go-lucky?
41. Do good manners and cleanliness matter much to you?
42. Have you often gone against your parents' wishes?
43. Do you worry about awful things that might happen?
44. Have you ever broken or lost something belonging to someone

else?

45. Do you usually take the initiative in making new friends?
46. Would you call yourself tense or 'high strung'?
47. Are you mostly quiet when you are with other people?
48. Do you think marriage is old fashioned and should be done away with?
49. Do you sometimes boast a little?
50. Are you more easy going about right and wrong than most people?
51. Can you easily get some life into a rather dull party?
52. Do you worry about your health?
53. Have you ever said anything bad or nasty about anyone?
54. Do you enjoy co-operating with others?
55. Do you like telling jokes and funny stories to your friend?
56. Do most things taste the same to you?
57. As a child were you ever cheeky to your parents?
58. Do you like mixing with people?
59. Does it bother you if you know there are mistakes in your work?
60. Do you suffer from sleeplessness?

61. Have people said that you sometimes act too rashly?
62. Do you always wash before a meal?
63. Do you nearly always have a 'ready answer' when people talk to you?
64. Do you like to arrive at appointments in plenty of time?
65. Have you often felt listless and tired for no reason?
66. Have you ever cheated at a game?
67. Do you doing things in which you have to act quickly
68. Is (or was) your mother a good woman?
69. Do you often decisions on the spur of the moment?
70. Do you often feel that life is really dull?
71. Have you ever taken advantage of someone?
72. Do you often take on more activities than you have time for?
73. Are there several people who are trying to avoid you?
74. Do you worry a lot of your looks?
75. Do you think people spend too much time safeguarding their future with savings and insurance?
76. Have you ever wished that you were dead?
77. Would you dodge paying taxes if you were sure you could never be found out?

78. Can you get a party going?
79. Do you try not be rude to people?
80. Do you worry too long after an embarrassing experience?
81. Do you generally 'look before you leap'?
82. Have you ever insisted on having your own way
83. Do you suffer from 'nerves'?
84. Do you often feel lonely?
85. Can you on the whole trust people to tell the truth?
86. Do you always practice what you preach?
87. Are you easily hurt when people find fault with you or the work you do?
88. Is it better to follow society's rules than go your own way?
89. Have you ever been late for an appointment or work?
90. Do you like plenty of bustle and excitement around you?
91. Would you like other people to be afraid of you?
92. Are you sometimes bubbling over with energy and sometimes very sluggish?
93. Do you sometimes put off until tomorrow what you ought to do today?

94. Do other people think of you as being very lively?
95. Do people tell you a lot of lies?
96. Do you believe one has special duties to one's family?
97. Are you touchy about some things?
98. Are you always willing to admit it when you have made a mistake?
99. Would you feel very sorry for an animal caught in a trap?
100. When your temper rises, do you feel it difficult to control?

Part 9: MacAndrew Alcoholism Scale (MAC)

The following section contains a number of statements. Read each statement and decide whether or not it describes you. If you agree with the statement and decide it describes you, check the box under the TRUE column. If you disagree with the statement and feel it does not describe you, check the box under the FALSE column. Please try to answer every statement. Remember to give your opinion of yourself.

True

False

[]

[]

1. I have a cough most of the time.
2. I pray several times a week.
3. Christ performed miracles such as changing water into wine.
4. Everything is turning out just like the prophets of the Bible said it would.
5. I do many things which I regret afterwards (I regret things more or more often than others seem to).
6. I am embarrassed by dirty stories.
7. I have had blank spells in which my activities were interrupted and I did not know what was going on around me.
8. I like to cook.

9. I like to read newspaper articles on crime.
10. Evil spirits possess me at times.
11. My soul sometimes leaves my body.
12. As a youngster I was suspended from school one or more times for cutting up.
13. I am a good mixer.
14. I have not lived the right kind of life.
15. I think I would like the kind of work a forest ranger does.
16. I enjoy a race or a game better when I bet on it.
17. In school I was sometimes sent to the principal for cutting up.
18. I know who is responsible for most of my troubles.
19. The sight of blood neither frightens me nor makes me sick.
20. I have had periods in which I have carried on activities without knowing later what I was doing.
21. I frequently notice my hands shake when I am trying to do something.
22. My parents have often objected to the kind of people I go around with.
23. I have been quite independent and free from family rule.
24. I have few or no pains.

25. I sweat very easily on even cool days.
26. If I were a reporter I would very much like to report on sporting news.
27. I seem to friends as quickly as others do.
28. I deserve severe punishment for my sins.
29. I played hooky from schools quite often as a youngster.
30. I have at times had to be rough with people who were rude or annoying.
31. I was fond of excitement when I was young (or in my childhood).
32. I enjoy gambling for small stakes.
33. If I were in trouble with several friends who were equally to blame, I would rather take the whole blame than give them away.
34. While in trains, buses, etc., I often talk to strangers.
35. I readily become one hundred percent sold on a good idea.
36. I have frequently worked under people who seem to have things arranged so that they get credit for good work but are able to pass off mistakes onto those under them.
37. I would like to wear expensive clothes.
38. The one to whom I was most attached and whom I admired the most as a child was a woman (mother, sister, aunt, or other women).

39. I am certainly lacking in self-confidence.
40. My table manners are not quite as good at home as when I am out in company.
41. I have never vomited blood or coughed up blood.
42. I used to keep a diary.
43. I liked school.
44. I am worried about sex matters.
45. I have felt that strangers were looking at me critically.
46. I have never been in trouble with the law.
47. Many of my dreams are about sex matters.
48. I cannot keep my mind on one thing.
49. I have more trouble concentrating than others seem to have.
50. I do not like to see women smoke.
51. Policemen are usually honest.

Part 10: Barron Ego-Strength Scale

The following section contains a series of statements. Read each statement and decide whether or not it describes you. If you agree with the statement and decide that it describes you, check the box under the TRUE column. If you disagree with the statement and feel it does not describe you check the box under the FALSE column. Please try to answer every statement. Remember to give your own opinion of yourself.

True

False

[]

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1. During the past few years I have been well most of the time.
2. I am in just as good physical health as most of my friends.
3. I have never had a fainting spell.
4. I feel weak all over most of the time.
5. My hands have not become clumsy or awkward.
6. I have a cough most of the time.
7. I have a good appetite.
8. I have diarrhea once a month or more.
9. At times I hear so well it bothers me.
10. I seldom worry about my health.

11. I feel sympathetic towards people who tend to hang on to their griefs and troubles.
12. I brood a great deal.
13. I frequently find myself worrying about something.
14. I have met problems so full of possibilities that I have been unable to make up my mind about them.
15. I get mad easily and then get over it soon.
16. When I leave home, I do not worry about whether the door is locked and the windows closed.
17. Sometimes some unimportant thought will run through my mind and bother me for days.
18. Often I cross the street in order not to meet someone I see.
19. I dream frequently about things best kept to myself.
20. I go to church almost every week.
21. I pray several times a week.
22. Christ performed miracles such as changing water into wine.
23. Everything is turning out just like the prophets in the Bible said it would.
24. I have had some very unusual religious experiences.
25. I believe my sins are unpardonable.

26. I would certainly enjoy beating a crook at his own game.
27. When I get bored I like to stir up some excitement.
28. I do many things which I regret afterwards (I regret things more or more often than others seem to).
29. I can be friendly with people who do things which I consider wrong.
30. Some people are so bossy that I feel like doing the opposite of what they request, even though I know they are right.
31. I like to flirt.
32. I am attracted by members of the opposite sex.
33. I never attend a sexy show if I can avoid it.
34. I like to talk about sex.
35. Sometimes I enjoy hurting people I love.
36. I have had very peculiar and strange experiences.
37. I have strange and peculiar thoughts.
38. I have had blank spells in which my activities were interrupted and I did not know what was going on around me.
39. When I am with people, I am bothered by hearing very queer things
40. At times I have fits of laughing and crying that I cannot control
41. I have had no difficulty in keeping my balance in walking.

42. Parts of my body often have feelings like burning, tingling, crawling or like "going to sleep".
43. My skin seems to be unusually sensitive to touch.
44. In my home we have always had the ordinary necessities (such as enough food, clothing, etc.).
45. I am easily downed in an argument.
46. I find it hard to keep my mind on a task or a job.
47. My way of doing things is apt to be misunderstood by others.
48. I sometimes feel that I am about to go to pieces.
49. I feel tired a good deal of the time.
50. If I were an artist I would like to draw flowers.
51. If I were an artist I would like to draw children.
52. I like collecting flowers or growing houseplants.
53. I like to cook.
54. I am made nervous by certain animals.
55. Dirt frightens or disgusts me.
56. I am afraid of finding myself in a closet or in a small closed space.
57. I have often been frightened in the middle of the night.
58. I like science.

59. I very much like horseback riding.
60. The man who had most to do with me when I was a child (such as my father, stepfather etc.) was very strict with me.
61. One or more members of my family is very nervous.
62. My sleep is fitful and disturbed.
63. When someone says silly or ignorant things about something I know about, I try to set him/her right.
64. I feel unable to tell anyone all about myself.
65. My plans have frequently seemed so full of difficulties that I have had to give them up.
66. I am not afraid of fire.
67. Policemen are usually honest.

Appendix C
DEPENDENT MEASURE

Conflict Tactics Scale (CTS)

WE ARE INTERESTED IN HOW COUPLES DEAL WITH CONFLICT IN RELATIONSHIPS. WE WOULD LIKE TO ASK SOME QUESTIONS ABOUT HOW YOU AND YOUR CURRENT PARTNER RESOLVE CONFLICT. THIS INFORMATION IS CONFIDENTIAL AND WE WOULD LIKE TO REMIND YOU THAT YOUR RESPONSES ARE ANONYMOUS. FOR EACH OF THE STATEMENTS YOU CAN USE THE NUMBER OF THE CORRECT RESPONSE TO INDICATE YOUR CHOICE.

Never	[]
Once a year, or less	[]
Two or three times a year	[]
Often, but less than once a month	[]
About once a month	[]
More than once a month	[]

1. How often have you resolved conflict by throwing something (but not at your spouse) or smashing something?
2. How often have you resolved conflict by threatening to hit or throw something at him/her?
3. How often have you thrown something at your spouse?
4. How often have you pushed, grabbed, or shoved your spouse?
5. How often have you hit (or tried to hit) your spouse but not

with anything?

6. How often have you hit (or tried to hit) your spouse with something hard?