

Alcohol, Drugs and Violence at the individual or pharmacological level among Intimate Stalking

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Abstract

Stalking became linked to domestic violence, alcohol, and drug abuse after the passage of anti stalking laws. The purpose of this study is to examine the relationship between alcohol, drugs, and physical violence at the individual or pharmacological level involving formerly intimate partners. This study uses data from 187 women stalked by formerly intimate partners. The data were collected from personal interviews conducted with stalking victims living in Southeastern Pennsylvania. Logistic regression analysis was conducted to examine the relationship between the predictor variables and the dependent variables. The stepwise regression analysis of physical violence among intimate stalking partners indicates that heavy drinking and crack/cocaine use are strong and statistically significant predictors of physical violence.

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“Stalking is an old behavior, but a new crime” (Meloy, 1998, p. xix). Although stalking has likely always been a part of human behavior, it is only recently that it has received legal recognition as an offensive behavior (Douglas & Dutton, 2001). After Robert Bardo murdered actress Rebecca Schaeffer in 1989, and following a string of murders in California by persons under restraining orders, the California legislature passed the first anti stalking law in 1990 (Spitzberg & Cupach, 2003). This incident served to increase awareness about the issue, and motivated research into the area of stalking and related mental health problems, typologies, legal issues, and the psychological effects on victims (McGuire & Wraith, 2000).

Most stalking literature has accumulated descriptive data about who stalks whom, and what stalking behavior looks like (O'Connor & Rosenfeld, 2004). It has been less helpful in illuminating boundaries around abnormal versus normal behavior, distinguishing which stalkers are more or less problematic and why, and which factors influence stalking perceptions by lay persons as well as by criminal justice professionals, service providers, or the victims themselves (O'Connor & Rosenfeld, 2004). Many stalking related studies attempted to identify the characteristics of stalking. However, few studies have attempted to examine any possible predictors of stalker's physical violence in intimate relationships.

The purpose of this study is to examine alcohol and drugs as predictors of stalkers' physical violence if they have had an intimate relationship with the victims and to identify variables that would predict future physically violent behavior. Stalking has been frequently associated with intimate partner violence, and stalkers are more likely to be violent if they have had an intimate relationship with the victim (Tjaden & Thoennes, 1998; Coleman, 1997). Some previous research has revealed that alcohol and drugs have statistically significant independent effects on the likelihood of physical violence during

intimate stalking (Roberts, 2005; Wilson et al., 2000; Zona et al., 1998) and some literature focuses on the relationship between specific types of drugs, alcohol abuse and physical violence among intimate partners (Parker, 1998). A number of studies have identified alcohol consumption as a significant predictor of family violence (Parker & Auerhahn, 1998) and use of drug has been found to be predictive of intimate violence (Willson, McFarlane, Malecha, Watson, Lemmey, Schultz, Gist, & Fredland, 2000). Even though intimate partner violence is frequently associated with stalking (Tjaden & Thoennes, 1998), few studies of stalking considered the relationship between alcohol, drugs and physical violence. Moreover, the stalking literature has not so far considered the effects of the level of alcohol consumption and the specific types of drugs on violence.

In this study, 187 stalking victims who were formerly intimate with their attackers were surveyed to identify possible risk factors that predict physical violence during intimate stalking. Specifically, this study examines the effect of alcohol, drug use and other predictors on physical violence between intimate stalking victims and offenders. Predictor variables considered in this study include alcohol abuse, drug abuse, and the demographics of stalkers and victims. Alcohol abuse examined heavy drinking and non heavy drinking. Drug abuse focused on the use of specific types of drugs such as marijuana, crack/cocaine, heroin, and legal drugs (prescription drugs). Demographic variables of stalkers and victims examined include age and race. The dependent variable in the study was physical violence. Forty six percent of victims had experienced physical violence in this study. A stepwise logistic regression was used to examine the relationship between the predictor variables and the dependent variables. The research questions guiding this study are (a) what are, if any, the differences between heavy drinking and non heavy drinking on stalking violence, and (b) differences between specific

types of drugs on violence?

Intimate Partner Violence in Stalking

“Most stalkers are not physically violent, but if they are, it is usually directed toward the object of their stalking rather than toward property or a third party” (Meloy, 1998, p. 5). Intimate partner violence is frequently associated with stalking (Tjaden & Thoennes, 1998), and stalking in cases of domestic violence has recently been associated with violence (Burgess, Baker, Greening, Hartman, Burgess, Douglas & Halloran, 1997). McGuire and Wraith (2000) stated that stalkers who have previously known their victims, or been involved in a relationship with them, pose the greatest risk of aggression or violence and the more intimate the relationship had been in the past, the more likely the stalker is to have aggressive tendencies (Brewster, 2002).

“Intimate partner violence has been considered one of the most pressing public health concerns affecting women of all ethnic, racial, and socioeconomic backgrounds” (Mechanic, Weaver, & Resick, 2000, p. 55). Mechanic, Weaver, and Resick (2000) studied stalking behaviors and intimate partner abuse by acutely battered women. They found extremely high rates of violent and harassing stalking behavior occurred with physically battered women and relative to emotional abuse, physical violence emerged as a strong predictor of stalking.

Tjaden and Thoennes (1998) survey found most stalking cases involved perpetrators and victims who knew each other: 77% of female victims had been stalked by an intimate, compared with 23% by a stranger, while 64% of male victims had been stalked by an intimate, compared with 36% by a stranger. They also found a strong link between stalking and other forms of violence in intimate relationships. For example, 81% of women who were stalked by a current or former husband or cohabiting partner were also physically assaulted by that partner and 31% were also sexually assaulted by that partner. Path

and Mullen (1997) conducted a study of a clinical sample of 100 stalking victims. They found that 35% of the victims had been physically or sexually assaulted.

In Palarea, Zona, Lane, and Langhinrichsen Rohling's (1999) study of 223 stalkers and victims, 135 intimate relationship cases were defined as married, engaged, cohabiting, dating, or in a sexual relationship, and 88 non intimate relationship stalking cases. They found intimate relationship stalkers used more dangerous stalking behaviors than non intimate relationship stalkers. Specifically, intimate stalkers threatened persons and property more often, committed more violence against persons and property, and used more physical approach behaviors in contacting their victims than non intimate stalkers.

Alcohol, Drugs and Physical Violence

"There is no doubt that alcohol is a factor in many men's violence toward women" (Galvani, 2004, p. 358). Bushman (1993) argued that for hundreds of years, it had been assumed that people behave more aggressively while under the influence of alcohol and other drugs, and many studies found a strong relationship between drug intoxication and violent crimes. Alcohol intoxication is often cited by American scientists as contributing to violence and aggression (Hamid 1998). In study populations comprised of mostly young males, individuals affected by alcohol assault family members, commit sex related crimes, and perpetrate homicides or other violent acts in a pattern that persists into adulthood. Collins (1980) found that alcohol consumption and problem drinking patterns as well as official crime rates differ on the basis of age, gender and race/ethnicity. Problem drinking was especially prominent in young adult males in the 18 to 25 age group.

Coleman and Strauss (1983) examined the relationship between alcohol abuse and family violence in a nationally representative sample of 2,143 American couples. They found a strong correlation between heavy

alcohol use and family violence; furthermore alcohol abuse was more associated with spousal violence than with parent to child violence. The link between alcohol abuse and family violence varies by sex, social class, and relation to family member, but the strongest association was for violence by blue collar husbands against their wives.

Taylor and Chermack (1993) conducted a study in their laboratory to demonstrate that aggressive behavior was related to quantity of alcohol consumed. They found that alcohol was a potent antecedent of aggressive behavior. The findings indicated that (a) “the effect of social pressure to aggress and of intense provocation is enhanced by alcohol, (b) instigating effect of alcohol depends upon the aggressive disposition of the alcohol consumer, and (c) the aggressive behavior of the intoxicated person can be regulated by altering cues that affect cognitive processes and that other depressants increase aggressive responding” (Taylor & Chermack, 1993, p. 78).

Murdoch, Phil and Ross (1990) showed that alcohol consumption was a significant presence in over half of all cases of violence that included homicide and both physical and sexual assaults. Thompson and Kingree (2006) examined the role of perpetrator and victim incident specific alcohol use in intimate partner violence outcomes. The sample included 501 men and 1,756 women who had experienced a violent physical assault by an intimate partner. They found that alcohol use increased the risk of intimate partner violence. A number of empirical studies have attempted to examine the associations between alcohol, drugs, and violence (Parker, & Auerhahn, 1998). Both alcohol abuse and intimate partner violence were significant public health problems and more than 7% of the population met standard criteria for alcohol abuse or alcoholism (Thompson & Kingree, 2006).

Different drugs have different pharmacological effects, which may or may not influence the user’s tendency toward violence. A shortcoming common to much of the work that has attempted to

disentangle the individual level relationships between drugs, alcohol, and violence is that many researchers failed to make a theoretical or empirical distinction between different types of drugs (Parker & Auerhahn, 1998). However, there is some literature that predicts relationships between specific types of drugs and violence.

Ball, Rosen, Flueck, and Nurco (1982) examined a sample of 243 heroin addicts in Baltimore, but they failed to uncover persuasive evidence for a link between heroin use and violent crime. They found some evidence that heroin users participated in economically motivated property crimes. Some evidence suggested that cocaine use and violent behavior may be associated, because one of the most widely reported pharmacological effects of cocaine in users is feelings of paranoia (Parker & Auerhahn, 1998, p. 296). Other evidence suggested that drug users who smoked the drug in the form of crack were equally likely to engage in violence as cocaine users, followed by users taking the drug by intravenous injection (Parker & Auerhahn, 1998).

Goldstein, Bellucci, Spunt and Miller (1991) examined the gender relationship between frequency of cocaine use and violence. They found that an increase in cocaine use was associated with a greater likelihood of being a perpetrator of violence among males. Many empirical studies examined the relationship between marijuana use and violence; overall results from laboratory studies were mixed and did not support or refute a direct relationship between marijuana and violence (Moore & Stuart, 2005). However, overall the findings of past cross sectional research indicated that marijuana use was highly prevalent among men who engaged in violence against their intimate partners.

Stalking is associated with intimate partner violence: alcohol is cited as a major contributing factor to intimate partner violence (Willson, et al, 2000), and stalkers tend to use more alcohol than nonstalkers (Burgess, et al, 1997). A few studies of stalking have considered the relationship between alcohol, drugs and physical violence and some

empirical research studies have found a correlation between alcohol, drugs, and intimate stalking physical violence (Brewster, 2002).

Roberts (2005) investigated 220 experiences of physical violence during stalking by former romantic partners. He found that drugs had statistically significant independent effects on the likelihood of physical violence. Thus, the likelihood of physical violence was increased if stalkers used drugs. However, he found no relationship between alcohol and violence. It is expected that there is a relationship between alcohol and drug abuse and physical violence. Specifically, heavy alcohol and crack/cocaine use by stalkers increase the likelihood of violence. Based on the extant literature, the following hypotheses were developed:

H1: Alcohol use by stalkers increases the likelihood of physical violence among intimate partners.

H2: Heavy alcohol use increases the probability of violence more than occasional use.

H3: Drug use increases the likelihood of violence.

H4: Crack/cocaine use by stalkers increases the likelihood of violence more than marijuana and heroin use.

Method

The data for this study were obtained from a survey by the National Institute of Justice (NIJ): Experiences and needs of formerly intimate stalking victims in Southeastern Pennsylvania, 1991-1995 (Brewster, 2000). This survey examined the nature of the stalking experiences of non-celebrity stalking victims who had previously been in intimate relationships with their stalkers.

Sample

Data were collected from a nonrandom sample of 187 females

stalked by former intimates during 1991–1995 living in Chester, Delaware, Bucks, Philadelphia, and Montgomery counties in Southeastern Pennsylvania. Counties were chosen based on efficiency in terms of shortest travel distance for the researcher and interviewer, as well as the potential of the population of that county to provide large numbers of subjects with varying demographic characteristics. Formerly intimate stalking victims volunteered for participation in the study. Participants were screened to ensure that they had been repeatedly harassed, followed, or threatened during the previous five years by someone with whom they had had an intimate relationship. The women must also have either experienced emotional distress, fear of bodily harm, actual bodily harm, or the belief that the stalker intended to cause one or more of the aforementioned.

Data Collection

Data were collected from personal interviews conducted with formerly intimate stalking victims from January 1996 to July 1997. Each interview lasted between one and three hours. They were semi structured face to face interviews and were conducted with each participant to gather data regarding their stalking experiences. Issues explored include the nature of the stalking, the relationship between the victims and stalkers, characteristics of the stalking experience, and the effects of the stalking. A variety of both open ended and fixed alternative questions were asked and respondents were allowed to elaborate following every question. Each interview began by requesting the victim to describe her stalking victimization in her own words.

Content analysis of the interview transcripts was used to identify variables: victim's prior relationship with the stalker, characteristics of the stalking, victim's attempt to discourage the stalker, assistance sought by the victim through formal and informal networks, the subsequent handling of the situation by others, the physical and

emotional effects of the stalking on the victim, and other victimization experiences. Demographic variables include age, race, education level, marital status, and employment status of both the victim and the stalker. However, because of the semi structured approach taken in conducting the interviews, not all respondents provided data pertaining to every variable. Each interview was tape recorded and later transcribed. A brief survey questionnaire was also administered to obtain demographic information about each victim and her stalker.

Variables

The dependent variable in the study is physical violence by formerly intimate stalkers. To measure physical violence, victims were asked, "Was there ever any violence? What form of violence was it?" The dichotomous variable indicated whether or not stalking victims had experienced physical violence from their former partner during the stalking experience.

The independent variables in this study were alcohol abuse, drug abuse, and demographics of stalkers and victims. The victims were asked if the stalkers drank alcohol and used drugs during the stalking period. Stalkers were divided into three groups of alcohol abusers; heavy drinkers, non heavy drinkers and non users. This variable was recoded as a categorical variable: non user was coded as 0, non heavy drinkers as 1 and heavy drinkers as 2. Wechsler, Lee, Nelson, and Lee (2001) defined heavy drinking as consuming three or more drinks over a 2 week period. Drug abuse examined the use of specific types of drugs such as marijuana, crack/cocaine, heroin, and legal drugs (prescription drugs) and their effect on violence. The specific independent variables were recoded as follows:

1. Victims' and stalkers' age - coded as continuous variables.
2. Victims' and stalkers' race - dummy variables recoded as white

or non white.

3. Stalkers' abuse of alcohol - a categorical variable recoded as heavy drinkers, non heavy drinkers and non users.
4. Stalkers' use of drugs - a series of dummy variables recoded as specific types of drugs such as marijuana, crack/cocaine, heroin and legal drugs (prescription drugs).

Results

Table 1 presents the occurrence of physical violence among victims. Forty six percent of victims had experienced physical violence and 54.0% of victims did not. Pushing, throwing, punching slapping and grabbing/pulling were the most commonly listed forms of violence.

Table 1

Extent of Physical Violence between Formerly Intimate Stalking Victims and Offenders

Physical Violence	Frequency	Percent
Yes	86	46.0
No	101	54.0
Total	187	100.0

* N=187

Characteristics of Victims

The sample for this study consisted of 187 female stalking victims who were formerly intimate with their stalkers. Table 2 presents the stalking victims' demographic variables such as age at the time of stalking, race, type of relationship, education, and marital status. All stalking victims were female.

Table 2
Characteristics of Victims

	Frequency	Percent
Age at time of victimization		
15-24	44	23.5
25-29	42	22.5
30-36	43	23.0
37-Older	41	21.9
Unknown	17	9.1
Total	187	100.00
Race		
White (Non Hispanic)	138	73.8
Black	43	23.0
Other	5	2.7
Unknown	1	.5
Total	187	100.00
Education		
Less than college	58	31.0
Any college or More	127	67.9
Unknown	1	.5
Total	187	100.00
Type of relationship		
Married	68	36.4
Cohabitated	46	24.6
Engaged	7	3.7
Dating	48	25.7
Other	17	9.1
Unknown	1	.5
Total	187	100.00

* N=187

The age at the time of the stalking ranged from 15 to 58 (Mean=30.78, range=43.00, median=30.00, and standard deviation=8.64). Seventy four percent of the victims in this study were white/non Hispanic and 23.0% were black and just 2.7% were other racial

minorities. The educational backgrounds of victims revealed that 31.0% had less than a college level education and more than 67% had completed at least some college or more.

The stalking victims had various types of intimate relationships with their stalkers. Thirty six percent of the victims had been married to their stalkers, 24.6% of the victims had cohabitated with their stalkers, 3.7% of the victims had been engaged to their stalkers, 25.7% of the victims had been dating their stalkers and 9.1% reported other intimate relationships.

Characteristics of Stalkers

Table 3 presents the stalkers' demographic variables: age at time of stalking, race, employment, and marital status. All stalkers were male and all stalkers' data were collected from the victims' interviews. This leads to the problem of missing data (29.9%), a problem that was resolved by replacing the missing data with the respective means. For example, unknown stalkers' age was recoded as 35, because the mean of the stalkers' age was 35.²⁾ Age at the time of the stalking ranged from 17 to 57 (Mean=35.10, range=44.00, median=35.00, and standard deviation=8.01). Thirty eight percent of the stalkers in this study were white/non Hispanic and 24.6% were black and only 4.3% were other racial minorities.

Fifty four percent of the stalkers were employed, 15.5% of the stalkers were unemployed and 31% had an unknown employment status. In addition, the victims provided their stalkers' current marital status. Twenty seven percent of the stalkers were not married, 10.2% of the stalkers were married and 63.1% of victims reported the stalkers' marital status as unknown.

2) The impact of this replacement of missing values was tested in the subsequent logistic regression analysis. It was found that replacing missing values of age with the mean did not change the outcome of the regression.

Table 3
Characteristics of Stalkers

	Frequency	Percent
Age at time		
17-24	38	20.3
25-30	29	15.5
31-36	28	15.0
37-Older	36	19.3
Unknown	56	29.9
Total	187	100.00
Race		
White (Non Hispanic)	71	38.0
Black	46	24.6
Other	8	4.3
Unknown	62	33.1
Total	187	100.00
Employment		
Unemployed	29	15.5
Employed	100	53.5
Unknown	58	31.0
Total	187	100.00
Current marital status		
Married	19	10.2
Not Married	50	26.7
Unknown	118	63.1
Total	187	100.00

* N=187

Table 4 presents the summary statistics for the dependent and the predictor variables in the regression analysis. The data revealed that 46.0% of victims experienced physical violence while they were being stalked by formerly intimate partners. The data also revealed stalkers' alcohol and drugs abuse. Fifty eight percent of the stalkers were reported

to engage in heavy drinking and 13.4% were reported to engage in non heavy drinking and 28.9% were reported to be non users.

Fifty one percent of stalkers were reported to abuse drugs during their relationship. The relationship between specific types of drugs such as marijuana, crack/cocaine, heroin, and legal drugs (prescription drugs) and stalking violence was also studied. Of stalkers who were reported to have used drugs, the largest category included crack/cocaine users. Almost thirty three percent of stalkers used crack/cocaine and 26.2% of stalkers used marijuana. However, only 3.7% of stalkers used heroin and 5.9% of stalkers used legal drugs.

Table 4

Summary Statistics for Independent and Dependent Variables

Variable		Frequency (N)	Percent (%)
Physical Violence	Yes	86	46.0
	No	101	54.0
Alcohol	Yes	133	71.1
	No	54	28.9
	Heavy Drinking	108	57.8
	Non-heavy Drinking	25	13.4
Drugs	Yes	96	51.3
	No	91	48.7
	Marijuana	49	26.2
	Crack/Cocaine	61	32.6
	Heroin	7	3.7
	Legal Drugs	11	5.9

* Total number of stalkers' drugs use may not equal to 96 because some stalkers used more than one type of drugs.

Logistic Regression Analysis

A logistic regression analysis was conducted to examine the impact of the independent variables on stalkers' physical violence and to identify variables that predict violence. The following dichotomous variables were

examined as predictor variables of physical violence: victims' and stalkers' race, and stalkers' use of alcohol and drugs. Race was recoded as white and non white. Alcohol use was recoded as non user (0: reference category), non heavy drinkers (1) and heavy drinker (2). Drugs were recoded as non user, marijuana, crack/cocaine, heroin, and legal drugs. Only the age of stalkers and victims were treated as continuous variables and alcohol use was treated as a categorical variable. All other variables were treated as dichotomous variables and coded as 0 and 1 for purposes of analysis. A stepwise statistical method was used to decide the order of entry for the predictors.

Table 5

Logistic Regression of Stalkers' Alcohol and Drug Use on Intimate Violence

Variables	B	S.E	Wald	df	Sig.	Exp(B)
Alcohol			7.828	2	.020	
Alcohol (1)	.413	.521	.628	1	.428	1.511
Alcohol (2)	1.027	.375	7.497	1	.006	2.793
Crack/Cocaine	.815	.344	5.621	1	.018	2.259
Constant	-1.093	.313	12.149	1	.000	.335
			-2 Log Likelihood			238.132
			Cox & Snell R Square			.101
			Nagelkerke R Square			.135

* Alcohol: Non user, Alcohol (1): Non heavy users, Alcohol (2): Heavy users

* Model chi square=19.901, df=3, Sig=.000

The overall model was significant (Chi square=19.901, df=3, Sig=.000) and the overall hit ratio was 63.1% (Table 5). The Hosmer and Lemeshow test was not significant (Chi square=3.822, df=4, Sig=.431). This nonsignificant value indicates that the model fit is acceptable. At the same time, 13.5% of the variance in the variable is accounted for by the linear combination of predictors, based on Nagelkerke. In other word,

heavy alcohol and crack/cocaine explain 13.5% of the relationship between predictor variables and physical violence.

Logistic regression analysis revealed two significant predictors of the stalker's physical violence. Table 5 reveals the results of forward stepwise logistic regression analysis. The stepwise regression analysis of physical violence among intimate stalking partners indicates that heavy use of alcohol and crack/cocaine had statistically significant independent effects on the likelihood of physical violence.

Specifically, alcohol use was divided into non use, light use and heavy use. The resulting exponentiated B coefficients, or odds ratios, for alcohol (2) was 2.793, meaning that heavy alcohol users are 2.8 times more likely than non users to engage in physical violence. In addition, stalkers who used non heavy alcohol are 1.5 times more likely to engage in physical violence than non users. However, this difference between non users and light users was found not to be statistically significant. Crack/cocaine users also revealed odds ratios was 2.259, meaning that crack/cocaine users are about 2.3 times more likely than drug non user to engage in physical violence. Table 5 presents the final model for the two significant predictors (heavy alcohol and crack/cocaine). None of the coefficients for the other covariates in the equation were statistically significant at the .05 level. In other words, none of the other variables in the analysis were found to be significant predictors of intimate stalking violence.

Discussion

One of the more interesting findings to emerge from this study is that stalkers' heavy alcohol and hard illicit drug use were better predictors of violence in intimate stalking relationships than non heavy alcohol use and consumption of some illicit drugs. A number of empirical studies have attempted to identify links between alcohol,

drugs, and violence at the individual or pharmacological level (Parker & Auerhahn, 1998), and some research found that biological effects differ by drug type and amount of use (Markowitz, 2005). Evidence of individual level association between alcohol and violence is widespread (Collins, 1981). However, there is no conclusive evidence that alcohol directly causes violent behavior (Galvani, 2004) and much research fails to make a theoretical and/or empirical distinction between different types of drugs (Parker & Auerhahn, 1998).

A number of theories have been proposed to explain the observed link between substance abuse and violence (Markowitz, 2005). Physiological theories explain the effects of alcohol on crime because the drug, ethanol, affects certain biological functions that lead to increased aggression (Galvani, 2004). The pharmacological properties of drug and alcohol consumption may also affect potential victims and lead to violence by altering judgment. An individual under the influence of alcohol or drugs may relax his/her guard, which can lead to an increased risk for assault (Markowitz, 2005).

The pharmacological argument based on one of the better known theories, Parker's (1995) disinhibition theory, assumes that the chemical content of alcohol has a direct effect on the central nervous system, resulting in the lower brain centers being released from higher brain controls. This reduces inhibitions, and behavior which is untoward when the individual is sober becomes acceptable (Collins, 1981; Coleman & Strauss 1983; Hamid, 1998). If people were removed from all constraints of normative structure, violence would be an attractive and effective method for dealing with some types of disputes. Furthermore, situations in which alcohol may be most likely to disinhibit normative proscriptions against the use of violence are those in which violence would be effective (Parker, 1995).

Some studies found a significant relationship between alcohol, drug use and physical violence (Roberts, 2005; Wilson, et al., 2000;

Rosenfeld, 2004). Similar with previous studies, this study revealed that heavy drinking, which is defined as consuming three or more drinks over a 2 week period, and crack/cocaine use have statistically significant independent effects on the likelihood of physical violence among intimate partners. These findings suggest that stalkers may be more likely to be violent to their victims when they drink more and use hard drugs. Parker and Auerhahn (1998) mentioned that alcohol consumption was a significant predictor of violence within families, intimate relationships, and those involving the closest interpersonal relationships. Alcohol or drug users may be more likely to stalk than offenders who do not have such problems. This may be because of the fact that alcohol and drug abuse may disinhibit the impulse to stalk (Melton, 2007). Consistent with Parker and Auerhahn (1998), this study's results suggest that norms prohibiting violence in resolving interpersonal disputes in close or intimate relationships may be weaker than norms that proscribe violence in other interactions; alcohol consumption would appear to contribute to the selective disinhibition of an already weak normative apparatus.

In conclusion, among this sample of 187 females stalked by formerly intimate partners, this study has identified a number of predictors of intimate stalking violence. Findings from this study are consistent with previous research that found a link between alcohol, drug abuse and physical violence among intimate partners. Previous research revealed that alcohol and drugs have statistically significant independent effects on the likelihood of physical violence during intimate stalking (Roberts, 2005; Wilson et al., 2000; Zona et al., 1998) and some literature focused on the relationship between specific types of drugs, alcohol abuse and physical violence (Parker, 1998).

Limitations of the Study

The findings of this study were based on secondary data from a

survey by the National Institute of Justice (NIJ). There are several limitations to this study. First, using secondary data is a limitation because the data were not collected specifically for use in this study. In this study the independent variables relied only on victims' interviews about their intimate partners. Therefore, the validity and reliability of stalkers' information is unclear. Because information was collected from the stalking victims, more specific information, such as types of drug use and frequency of alcohol drinking is unclear. Therefore, the problem of missing data is much greater with respect to the stalkers than their victims. The next limitation is the influence of the sample size on the results of the analysis. The sample size was small and data were collected from a nonrandom sample of 187 females stalked by former intimates during 1991-1995 living in five counties in Southeastern Pennsylvania. Generally the results of analyses are significant if the sample size is large.

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