© 2006 BY THE JOURNAL OF DRUG ISSUES

METHAMPHETAMINE USE AND VIOLENCE

IRA SOMMERS, DEBORAH BASKIN

The current research analyzed the relationship between methamphetamine use and violence. Interviews were conducted with a sample of 205 respondents. The research was based on life history interviews with individuals who used methamphetamine for a minimum of three months and who resided in Los Angeles County. Of the 205 respondents, 55 (26.8%) had committed violence while under the influence of methamphetamine. Males comprised two thirds of the 55 respondents (N=36). Of the total sample, 30% of males and 23% of females committed methamphetamine-related violence, respectively. Overall, the 55 respondents reported 80 separate violent events while using methamphetamine. Of these 80 events, 41 (51.4%) acts of violence involved domestic relationships, 28.6% (N=23) of the violent events were drug related, 8.6% (N=7) were gang related, and 11.3% (N=9) involved random acts of violence (e.g., road rage, stranger assault). The study findings suggest that methamphetamine use heightens the risk for violence. Everyone interviewed agreed that methamphetamine has clear abuse and violence potential. Having said this, it is crucial to state that there was no evidence of a single, uniform career path that all chronic methamphetamine users follow. Progression from controlled use to addiction is not inexorable. Furthermore, a significant number of sample members experienced limited or no serious social, psychological, or physical dysfunction as a result of their methamphetamine use. Most germane to this study, we found that violence is not an inevitable outcome of even chronic methamphetamine use.

INTRODUCTION

As national concern over crack wanes, public attention (media and political) is now riveted on an "even worse" drug, methamphetamine. According to Dr. Michael Abrams of Broadlawn Medical Center in Des Moines, who was quoted in a 1996 *New York Times* article on drugs in Iowa, "This is the most malignant addictive

---

Ira Sommers, Ph.D., is a professor in the School of Criminal Justice and Criminalistics at California State University, Los Angeles. Over the course of his academic career, Dr. Sommers has conducted and published research on a wide range of topics, including female offending, substance abuse and violence, forensic mental health, and domestic violence. **Deborah Baskin**, Ph.D., is the chair of the School of Criminal Justice and Criminalistics at California State University, Los Angeles. Dr. Baskin has published on a variety of topics, including female offending, substance abuse and violence, forensic mental health, and community mediation.

JOURNAL OF DRUG ISSUES 0022-0426/06/01 77-96

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

drug known to mankind. Crack, wicked as it is, cannot compare to the destructive power of methamphetamine" (p. A1). Methamphetamine is a powerfully addictive stimulant that dramatically affects the central nervous system. The drug is made easily in clandestine laboratories with relatively inexpensive over-the-counter ingredients. These factors combine to make methamphetamine a drug with high potential for widespread abuse. As with crack, sensational headlines have become commonplace in newspapers across the country:

- Meth wreaks havoc across U.S. (Williams, 2002)
- The drug that makes users "crazy" (Clothier, 2002)
- A rural epidemic: Meth epidemic fueling child abuse (Schwartz, 2001)
- Meth kids: Heartland's tragic tale (Pasternak, 1998).
- Meth cases put strain on ERs (Leinward, 2006)
- Breast milk cited in meth fatality (Gold, 2003)

Despite the sensationalism of these headlines, several characteristics of methamphetamine use do indeed warrant concern. For one, methamphetamine use offers a longer lasting high than crack at a similar price. Second, it does not appear to have the same stigma associated with it that crack markets and chronic crack use did. Third, its manufacture and distribution, in large quantities, by professional trafficking organizations in the U.S. and Mexico could lead to more widespread use.

For that matter, there is evidence that methamphetamine use is becoming more prevalent.[1] According to the National Survey on Drug Use and Health (Substance Abuse and Mental Health Services Administration [SAMHSA], 2004), over 12 million people (5.3%) in the U.S. reported trying methamphetamine at least once in their lifetime. The highest rate of methamphetamine use was among the 26 to 34 age group, with 6.7% reporting lifetime methamphetamine use during 2002. The second highest group was young adults (18-25), with 5.7% reporting lifetime methamphetamine use during 2002. According to the 2002 Monitoring the Future Study (National Institute on Drug Abuse [NIDA], 2003), 6.7% of high school seniors reported using methamphetamine within their lifetime. Lifetime use among 8th and 10th graders was 3.5% and 6.1%, respectively. Also during 2002, 4.7% of high school seniors reported using Ice, also known as crystal methamphetamine, within their lifetime. During 2002, 11.9% of college students and 14.8% of young adults (ages 19-28) reported using methamphetamine at least once during their lifetimes.

Despite these reports indicating a greater availability and consumption of methamphetamine, as well as anecdotal reports of its relationship to violence, little empirical knowledge exists about the contexts of social life in which its use and

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

violence take place. Unlike crack, this drug/violent crime relation exists outside of the familiar inner city context. Therefore, the explanations developed for crack markets may not be appropriate for understanding the methamphetamine/violent behavior relationship.

Other significant differences exist between crack and methamphetamine that warrant exploration. In the case of methamphetamine, for instance, those who participate in the market are economically, educationally and demographically different from those who have been involved in crack-cocaine. The dominant methamphetamine user is an employed white male between the ages of 19 and 40. As stated above, recent trends suggest that its popularity has grown among college students and young professionals of both sexes. Often, methamphetamine is included in this group's repertoire of "party drugs". At other times, they use methamphetamine for increased mental and physical acuity during peak work or study times. Adolescent females use it for weight loss; student athletes for performance enhancement; and construction workers and truck drivers for stamina.

Furthermore, there are psychopharmacological differences between crack and methamphetamine use. In contrast to crack, methamphetamine produces a longer lasting high. As a result, methamphetamine users are able to remain away from the market environment longer as they are not constantly "chasing the pipe." Consequently, methamphetamine users are more likely to return to work, school, or home settings while high. Thus, in contrast to their crack using counterparts, they are less likely to be entrenched in street networks yet may be likely to engage in violent behavior at home, in the workplace, or within other more mainstream social settings (Lattimore, 1997).

Methamphetamine is highly addictive and users trying to abstain from use may suffer withdrawal symptoms that include depression, anxiety, fatigue, paranoia, aggression, and intense cravings for the drug (Katsumata, Sato, & Kashiwade, 1993). Chronic methamphetamine use can cause violent behavior, anxiety, confusion, and insomnia. Users can also exhibit psychotic behavior including auditory hallucinations, mood disturbances, delusions, and paranoia, possibly resulting in homicidal or suicidal thoughts (Albertson, Walby, & Derlet, 1995).

Methamphetamine users in treatment have reported physical symptoms associated with the use of methamphetamine including weight loss, abnormal rapidity of heart and respiration, insomnia, and muscular tremors. The behavioral and psychiatric symptoms reported most often include violent behavior, repetitive activity, memory loss, paranoia, delusions of reference, auditory hallucinations, and confusion or fright. Empirical studies, however, concerning the health and social consequences of methamphetamine use are sparse.

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

One significant finding common to the few ethnographic studies on methamphetamine use is its relationship to violent behavior. Morgan's (1997) study of methamphetamine use in San Francisco, Honolulu, and San Diego indicates a significant relationship between methamphetamine use and violence for both males and females. For example, 53% and 44% of males and females, respectively, in the Honolulu sample reported engaging in violent acts due to methamphetamine use. Furthermore, a majority of respondents across all sites reported experiencing major psychological problems. Overall, 58% of the males and 52% of the females reported paranoia due to their methamphetamine use. Similarly, an ethnographic study in Arizona (Castro, 1997) suggests that methamphetamine users burn out even faster and often develop higher levels of paranoia than they experience with cocaine.

Overall, empirical evidence concerning patterns of violence is sparse. The current project was designed to explore the relationship among methamphetamine use and violence. The primary aim of the project was to gather data on the contexts, circumstances and interactions in events where methamphetamine users used violence.

RESEARCH METHODS

THE SAMPLE

The selection of individuals must address a common problem faced in criminological research, that is, balancing representativeness with concerns over low base rates. Criminological research that tests specific hypotheses often faces the problem of constructing samples that are both representative of the general population and inclusive of a significant number of active offenders. However, because the base rates of methamphetamine use and violent events are low and the population parameters unknown, we consciously trade off the external validity from representative samples for the internal validity of detailed information on individuals who exhibited behaviors of interest.

For this reason, theoretical samples from populations of presumed offenders were preferable over general population samples. Theoretical sampling was used because empirical knowledge from our previous studies (Baskin & Sommers, 1998; Sommers, Baskin, & Fagan, 2000) directed our efforts to locate potential informants in specific contexts and social areas, and to sample within known groups.

The research was based primarily on in depth, life-history interviews with 205 individuals who used methamphetamine for a minimum of three months and who resided in Los Angeles County. The respondents were recruited from two social settings: (1) adult methamphetamine users participating in a drug treatment program for methamphetamine users and (2) adult methamphetamine users at liberty in the community and having little or no contact with treatment or criminal justice

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

institutions. The sample contains 98 respondents (47.8%) in drug treatment, 107 (52.2%) active community methamphetamine users.

The data collection process began with the recruitment of a sample of methamphetamine users and dealers from a drug treatment program. Arrangements for respondent recruitment were made with a drug treatment program for methamphetamine users in Los Angeles County. Meetings were held between the senior research staff and the treatment program director and program participants. The research study was explained in detail and contact letters were left with the program participants. Potential respondents were instructed to call for appointments, at which time they were screened for eligibility (i.e., used methamphetamine for at least three months) and arrangements were made for the interview. Once the initial respondents were identified, they were asked to nominate or refer "someone like them who also has been involved in methamphetamine use and/or sales. Thus, the initial sample was comprised of treatment program participants and "chain referrals" from these treatment respondents.

A broader community sample was recruited through advertising in local university newspapers. This tactic helped expand our sample to unknown members of the population who have no contact with formal treatment or criminal justice institutions. Chain referral or "snowball" sampling techniques also were used with this sample.

Interview Protocol

The primary goal of this research was to capture thick descriptions (Geertz, 1973) of the relationship between methamphetamine use and violent events. A life history approach was used to describe initiation into methamphetamine use and its relationship to violence (see Sommers & Baskin, 2004 for detailed discussion of study methods). Depth interviewing was the most appropriate method to record information about specific events and to allow respondents to reflect on those events. The interviews were conversations about events and their contexts. Structured, but open-ended interview guides were used.

The open-ended technique created a context in which respondents were able to speak freely and in their own words. Furthermore, it facilitated the pursuit of issues that were raised by the respondents during the interview but were not recognized beforehand by the researchers. The in depth interview approach enabled us to pursue information about specific events, as well as provide an opportunity for respondents to reflect on those events. As a result, we were able to gain insight into the study participants' attitudes, feelings and other subjective orientations to their experiences.

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

Detailed accounts of the violent events were obtained during interviewing. These data reveal the how, where, with whom, and why the respondents got involved in violent crime. A biographical approach was used to describe subjects' experiences with violent crime, weapons use, and the situated transactions of these events. In addition, respondents were asked to describe the relationship, if any, between the violent event and methamphetamine use and/or distribution including amounts of specific substances ingested prior to the time of the incident by the offender, victim, and any accomplices, and the state of intoxication or other drug states (e.g., "crashing") manifested by these individuals prior to the event. A narrative account of how these drugs and drug states were related to the violent event was obtained.

Detailed life history information about prior involvement in drug use was also obtained during the interview. Each respondent was asked if they ever used a variety of specific substances (including marijuana, hallucinogens, inhalants, cocaine, crack, heroin, PCP, depressants, and alcohol), routes of administration, age at first use, and frequency of use in the 12 months prior to the instant offense. Complete drug treatment histories, including the number of times ever enrolled in specific type of treatment and detoxification programs, length of time enrolled in each type of program, ages at which treatment was received, reasons for entry into treatment, and factors that led to attrition from treatment were also documented for each respondent.

Interview Procedures

Interviews were conducted in a neutral location such as a library, park, or a private office in a university. In order to convey the neutrality and anonymity of the study, we avoided offices of either criminal justice agencies or clinical settings. The participants were given a generous travel allowance ($10), regardless of the length or duration of their trip. A stipend of $20 was paid at the conclusion of the interview, although it was not contingent on completion of the interview. Interviews were conducted by the principal investigators and two graduate research assistants.

Each of the respondents were informed in detail about the nature of the study, its sponsor, sources of funding, goals and objectives, probable duration of the study, and the extent and time of participation. Before beginning the interview, a respondent must have definitely stated "yes" when asked if he/she gives his/her informed and voluntary consent to being a respondent in this study.

Study Measures

Dependent Variable

As part of the interview, sample members were asked whether they had ever been violent while under the influence of methamphetamine. Violence was defined

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

as any form of deliberate physical harm inflicted on another individual. Violence is coded as a dichotomous variable, the "no" category is the reference (excluded) group. Fifty-five (27%) respondents reported having committed methamphetamine-related violence.

Independent Variables

Demographic

Five demographic classifications are used in these analyses: sex, age, race, years of education, and marital status. *Sex* is a dichotomy of male and female. In the dummy variable regression analyses, the female category is the reference (excluded) group. *Age* is coded as a continuous variable. *Race* has four categories: White, Black, Latino, and Asian. In the regression analyses, whites are treated as the reference group. *Number of years of education* is coded as a continuous variable. *Marital status* is a dichotomy of married/living as married and single (never married, divorced, separated, widowed). In the regression analyses, single is treated as the reference group.

Childhood and Adolescent Deviance

Lauritsen, Sampson, and Laub (1991, p. 239) concluded that "the stability of aggressive behavior patterns throughout the life course is one of the most consistently documented patterns found in longitudinal research." One possible explanation of the continuity over time is that there are persisting individual differences in an underlying potential to commit aggressive or violent behavior. In any cohort, the people who are relatively more aggressive at one age also tend to be relatively more aggressive at late ages, even though absolute levels of aggressive behavior and violence are different at different ages (Farrington, 1998). To examine the continuity of deviant and violent behaviors across the life course, four measures describing violent and substance use behaviors are utilized. Sample members were questioned about their involvement in deviant behaviors during their school (childhood and adolescent) years. Respondents were asked to indicate how frequently they were involved in (1) fighting, (2) weapons possession, (3) alcohol use, and (4) drug use. Self-reports were measured on a five-point scale (0= never to 4= frequently). In addition, sample members were asked if they ever physically harmed themselves in any way. Violence toward self was coded as a dichotomous variable (yes/no).

Family Background

To provide measures of the extent to which sample members were exposed to parental deviance during childhood and adolescence, eight family background measures are included in the analyses. Scales and indices to measure family

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

contributions to violent behavior were derived primarily from social learning theory (Fagan & Wexler, 1987).

Family type is a dichotomy of intact (including step-parents) and single parent family types. In the dummy variable regression analyses, the single parent family category is the reference (excluded) group. *Family arrest*, *family mental health problems*, *family drug use*, *family alcohol abuse*, and *family drug use violence* are all dichotomous (yes/no) variables. In the dummy variable regression analyses, the "no" category is the reference (excluded) group.

Sample members were asked about the extent to which their parents used physical violence during their childhood (birth to age 16). Separate ratings were obtained for *violence between parents* and *childhood abuse*. Ratings were based on a five-point scale, ranging from (0) never used physical violence to (4) used physical violence frequently.

Substance Abuse

Detailed life history information about prior involvement in drug use was obtained during the life history interviews. Each respondent was asked if they ever used 11 specific substances (including alcohol, marijuana, hallucinogens, inhalants, cocaine powder, crack cocaine, heroin, PCP, depressants, other narcotics, and methamphetamine), routes of administration, age at first use, frequency of use, and drug-specific violence. For the purposes of the present analyses, five measures were used: (1) the total number of drug-related violence events, (2) age of onset of methamphetamine use, (3) the frequency of methamphetamine use, (4) number of months of methamphetamine use, and (5) method of administration of methamphetamine (snort, smoke, inject).

Criminal Offending

Sample members were questioned about their lifetime offending behavior. Respondents were asked to indicate if they had ever engaged in 12 different crimes, the age of initiation for each crime, and the frequency of involvement for each crime. In the current analyses, two indices of offending behavior were created. For each respondent, these included the *total number of violent offenses* reported (assault, robbery, weapons possession, attempted murder, and murder) and the *total number of nonviolent offenses* reported (auto theft, shoplifting, fraud, burglary).

Drug Problems

Sample members were asked if they had experienced any of 13 drug-related problems while using methamphetamine. The 13 problems covered a wide range of intrapsychic, personal, and interpersonal difficulties. Factor analysis with

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

varimax rotation and a Kaiser criterion was used to create indices of drug problems. The analysis revealed two factors. The first factor seems to capture intrapsychic problems related to methamphetamine use. *Psychological problems* is an additive index comprised of five items that the respondent had experienced as a result of methamphetamine use: depression, paranoia, hallucinations, anxiety/irritability, and sleeplessness. The second factor involves difficulties in social functioning and in fulfilling role obligations. *Social problems* is an additive index comprised of four items: had trouble at school, had trouble at work, had family problems, and had financial problems.

CONTEXTUAL FACTORS

For each methamphetamine-related violent incident reported, sample members were asked a series of open-ended questions about the circumstances of the violent event. The narrative descriptions provided by each respondent were coded in the following ways.

Gender of the victim. The gender of the victim was coded as either male or female.

Relationship of the victim to the offender. The relationship was coded as stranger, casual acquaintance, close friend, girlfriend/boyfriend, and family member.

Location of violent incident. The situation in which the violent event occurred was coded as a public place such as the street, park, outside a store; a private party; the sample member's home; a friend's home; and a relative's home.

Involvement of others. The extent to which the violent event involved peers or other people was coded as alone, while with friends, and with other family members.

Use of alcohol and drugs (offender and victim). The use of alcohol and drugs, including methamphetamine, was coded for both the offender and victim at the time of the violent incident.

Use of weapon. The use of a weapon by the offender during the violent incident was coded as none, gun, knife, and other.

Interactional processes. In dispute-related violence, the distinction between offender and victim is not necessarily clear. In some instances it is more accurate to describe the offender and victim as two antagonists and then examine the routine activities that are likely to bring them together. In many cases, the actions of the offender is a function of the victim's behavior and the implications

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

of that behavior for defending one's well-being or public self-concept. In the current analyses, the sample members were asked if their victims threatened, insulted, argued, and/or physically assaulted them before they engaged in violent behavior.

Sample Description

The majority of respondents were Hispanic male high school graduates in their twenties and possessing on average 25 months of work experience. The youngest respondent was 18 years old and the oldest 46; the median age was 26 years. Three in five were high school graduates, and 20% attended some college. Most of the respondents worked in a legitimate job (86%).Approximately three in five respondents (57.6%) worked in unskilled and semi-skilled occupations (e.g., clerical, sales and factory jobs). However, approximately 27% of the sample worked in semiprofessional and professional jobs (e.g., counselor, teacher, accountant).

Respondents reported that they were engaged in a wide range of criminal and deviant activities. Nearly all said they were experienced drug users. This is not surprising since the criterion for inclusion in this study was methamphetamine use. Seventy-six percent had used cocaine, 57% had used crack, 62% had used hallucinogens, and 97% had used marijuana. Of the 205 people interviewed, 45.4% (N=93) had committed at least one violent crime. Fifteen percent reported involvement in robbery, 17% reported involvement in attempted murder, 5% in murder, 34% had committed assault, and 53% had carried weapons. However, only 25% (N=32) of the sample were ever arrested for a violent crime. Seventy-nine percent (N=103) of the respondents were involved in nonviolent crime.

Since the study participants were recruited from two different social settings, comparisons were made between the treatment and community samples. The results revealed some demographic and background differences. The respondents in the treatment group were more likely to be male (67.4% vs. 50.5%, p=.014), older (28.76 vs. 26.12, p=.001), less educated (11.84 vs. 12.28, p=.036), and to have school-based alcohol problems (46.9% vs. 32.7%, p=.038). The treatment group also had higher mean scores on the methamphetamine-related psychological (3.57 vs. 3.00, p=.009) and social problem (1.77 vs. 1.27, p=.009) scales. However, there were no significant differences between the two groups in terms of family background variables. Perhaps most important, there were no significant differences with regard to methamphetamine use and violence: age of initiation of methamphetamine use (19.28 vs. 18.85), frequency of use (3.17 vs. 3.20), and methamphetamine-related violence (29.6% vs. 24.3%). Furthermore, there were no interaction effects between gender or age and methamphetamine-related violence. Finally, approximately the same percentage of respondents in each group had committed prior violence (59.8%

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

vs. 61.5%). In light of the similarities between the two sample subgroups, subsequent analyses are based on the total sample (N=205).

Study Results

Prevalence of Methamphetamine-Related Violence

Of the 205 respondents, 55 (26.8%) had committed violence while under the influence of methamphetamine. Males comprised two thirds of the 55 respondents (N=36). Of the total sample, 30% of males and 23% of females committed methamphetamine-related violence, respectively. Twenty of the 55 respondents who committed methamphetamine-related violence (36.4%) reported that they had never committed a violent crime prior to the methamphetamine-based events. Overall, the 55 respondents reported 80 separate violent events while using methamphetamine. Of these 80 events, 41 (51.4%) acts of violence involved domestic relationships, 28.6% (N=23) of the violent events were drug related, 8.6% (N=7) were gang related, and 11.3% (N=9) involved random acts of violence (e.g., road rage, stranger assault).

In contrast to their crack using counterparts, methamphetamine users are less likely to be entrenched in street networks yet more likely to engage in violent behavior at home, in the workplace, or within other more mainstream social settings. Our study data suggest that methamphetamine-based violence may indeed be more likely to occur within private domestic contexts, both family and acquaintance relationships. Fifty-five (68.6%) of the 80 violent events occurred in private homes, 11.4% (N=9) at parties, 2.9% (N=2) at work, and 17.1% (N=14) in public settings (e.g., parks, street, roadways).

Bivariate Analyses: Behavioral and Lifestyle Characteristics Associated With Methamphetamine-Related Violence

To explore the types of factors that placed sample members at increased risk of committing violence, we examined the association between methamphetamine-related violence and a series of behavioral and lifestyle characteristics (Table 1). The data reveal clear tendencies for risk of violence to be associated with individual adjustment and lifestyle, including childhood and adolescent deviance (fighting, alcohol and drug use, weapons possession, and violence toward self), criminal activity, drug abuse (age of onset for methamphetamine use), and psychological and social problems.

Comparisons of results for males and females showed similar patterns of statistical significance for both groups. Differences, however, did exist between the two groups. Males who engaged in methamphetamine-related violence were more likely than their female counterparts to manifest social functioning problems (2.28 vs. 1.89). Males who were violent also were more likely to carry weapons during childhood and adolescence (44.4 vs. 15.8), while females were more likely to attempt to harm

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

TABLE 1
SIGNIFICANT BEHAVIORAL AND LIFESTYLE CHARACTERISTICS ASSOCIATED WITH METHAMPHETAMINE-RELATED VIOLENCE

		Meth-Related Violence		
		Yes	No	p
Childhood and Adolescent Deviance				
Fighting		89.1%	65.4%	.001
Weapons possession		34.6%	20.0%	.031
Alcohol use		58.2%	32.7%	.001
Drug use		89.1%	65.4%	.001
Violence toward self		5.5%	20.3%	.011
Substance Use				
Age of onset (meth)	mean age	17.75	19.57	.010
Prior Crime and Violence				
Violent crime	mean #	1.73	1.22	.041
Nonviolent crime		1.60	1.19	.009
Clinical Factors				
Psychological problems index		3.67	3.02	.004
Social problems index		2.15	1.13	.000

themselves (0 vs. 4.8%). Furthermore, unlike the results for the total sample, family factors were statistically significant for male perpetrators of violence. Specifically, a history of family arrests (38.8% vs. 21.1%) and family drug abuse (61.1% vs. 26.3%) differentiated males from females. To a large extent, however, the results suggest that the factors associated with male and female methamphetamine-related violence are quite similar.

PREDICTORS OF METHAMPHETAMINE-RELATED VIOLENCE

Regression analyses help to pinpoint the effects of each measure relative to others included in the model (Table 2). When variables from all six categories of risk factors are simultaneously incorporated into the equation, only eight variables remain as important predictors of violent behavior. Exposure to family deviance (arrests and child abuse), previous substance-related violence, social functioning problems, age of onset for methamphetamine use, and childhood fighting significantly increased the odds of engaging in methamphetamine-related violence. Adolescent violence toward

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

TABLE 2
SUMMARY OF LOGISTIC REGRESSION COEFFICIENTS FOR DISPOSITIONAL, HISTORICAL, AND CLINICAL PREDICTORS OF METHAMPHETAMINE-RELATED VIOLENCE

	B	p	odds ratio
Dispositional Factors			
Demographic			
Age	-.590	.539	.554
Sex	-203	.079	.816
Black	-1.99	.215	.136
Hispanic	-1.19	.217	.304
Other	-1.54	.704	.216
Education	.273	.273	1.313
Married	-.511	.127	1.667
Childhood and Adolescent Deviance			
Fight	**4.42**	**.007**	**83.14**
Weapons possession	1.19	.220	.303
Alcohol use	.871	.385	2.389
Drug use	1.069	.431	2.911
Violence toward self	**-4.177**	**.003**	**.010**
Historical Factors			
Family			
Intact family	1.325	.193	3.763
Family arrest	**2.615**	**.028**	**13 .187**
Family mental health problems	**-3.38**	**.048**	**.073**
Family drug use	1.933	.569	6.913
Family alcohol use	-.061	.948	.940
Family substance-related violence	-.782	.514	.458
Partner violence index	-.214	.281	.807
Child abuse index	**.429**	**.031**	**1.536**
Substance Use			
Prior substance-related violence	**2.606**	**.000**	**13.550**
Age of onset (meth)	**.271**	**.039**	**1.312**
Frequency of meth use	.310	.575	1.364
No. years of meth use	.060	.656	1.062
Crime and Violence			
Violent crime	.341	.341	1.407
Nonviolent crime	.025	.959	1.026
Clinical Factors			
Psychological problems index	.262	.468	.842
Social problems index	**1.719**	**.002**	**5.580**

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

self and family mental health problems decreased the likelihood of committing methamphetamine-related violence.

Separate analyses for males and females were conducted (not shown). The results indicate important similarities and differences in the risk factors for males and females. For both genders, a history of family arrest, problems in social functioning, frequency of methamphetamine use, and involvement in crime (violent and nonviolent) are strong predictors of methamphetamine-related violence. However, the frequency of methamphetamine use and problems in social functioning had more pronounced impact on male violence, as opposed to female violence. Two variables differentiated male and female violence. Length of methamphetamine use and family alcohol abuse predicted male but not female violence.

Situational or Generalized Violence

The primary goal of this research was to assess the relationship between methamphetamine use and violence. As discussed in the introduction, anecdotal evidence suggests that the use of methamphetamine leads to violent behavior. The temporal order of methamphetamine use and violence must be considered in order to understand this relationship. Furthermore, if violence is a manifestation of methamphetamine use, the distribution of methamphetamine-related violence should differ from the distribution of nondrug violent acts.

As reported above, 35 of the 55 (63.6%) respondents who committed methamphetamine-related violence reported that they had committed a violent crime prior to the methamphetamine-based events. Age of onset for methamphetamine use was compared with initiation ages for five violent crimes. For these 35 sample members, the mean age of initiating methamphetamine use was 17.52. The age of onset for assault for these respondents was 17.14, robbery (15.50), weapons possession (14.85), murder (16.00), and attempted murder (15.07). The age of onset for all five violent crimes was younger than the initiation age for methamphetamine use.

On the other hand, 20 of the 55 respondents who committed methamphetamine-related violence (36.4%) reported that they had never committed a violent crime prior to the methamphetamine-based events. However, 80% (N=16) of these respondents had committed aggressive acts while under the influence of other drugs. Of these 16 respondents, 12 were female and 4 were male. The 20 sample members reported 20 methamphetamine-related violent events. Of these 20 violent episodes, 18 (90%) were domestic in nature. The age of onset for methamphetamine use for these 20 respondents was 18.35. Although these sample members did not report any previous violent crimes, they did engage in nonviolent crime. The average age of initiation for drug dealing (15.17), auto theft (16.75), and shoplifting (13.57) was significantly lower than the average onset age for methamphetamine use.

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

Mean comparisons of the 20 sample members who engaged in methamphetamine-related violence but who had no history of reported violent crime were compared with respondents (N=35) who committed methamphetamine-related violence and also had histories of violent crime (see Table 3). The results indicate that childhood and adolescent development variables (school fighting, school drug use, school weapons possession, adolescent violence toward self) were the key factors that differentiated the two groups. In addition, the previous violent subgroup was more likely to be male. These results are fairly consistent with those for the entire sample. Adolescent and adult deviance are the best predictors of methamphetamine-related violence.

TABLE 3
SUMMARY OF SIGNIFICANT FACTORS DIFFERENTIATING METHAMPHETAMINE VIOLENT SUBGROUPS (THOSE WITH AND WITHOUT HISTORIES OF VIOLENT CRIME)

	Previous Violent Crime	
	Yes (N=35)	**No (N=20)**
Sex (1=male)	85.7%	30.0%***
School fights	97.1	75.0**
School weapons	48.6	10.0***
School drug use	100.00	70.0***
Violence toward self	0.0	15.0**

* p < .05 ** p < .01 *** p < .001

CONCLUSIONS

The primary goal of this study was to assess the methamphetamine-violence connection. In this final section we review briefly our main findings and reflect upon what they might mean. In summing up, we must note that our respondents were in some respect unusual. We did not seek to study the nature and extent of methamphetamine use and violence among the general population, for this strategy would have given us mostly respondents who merely experimented with the drug. Instead, we set out to find only those who had used substantial amounts of methamphetamine over a long period of time. Thus, our findings must be understood as pertaining to this group of heavy users in the community.

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

Much of the evidence that links methamphetamine use with violence is based on clinical reports. Unfortunately such reports are replete with methodological problems. They are limited most severely by their inability to control for the nondrug state or trait characteristics of study patients. Temporal order questions predominate, and increased violence observed in a drug abusing population might as readily be attributed to unspecified premorbid characteristics of that population as to drug pharmacology per se.

Evidence from this study supports previous research that suggest continuity from youth aggression to adult violence (Farrington, 1998). Findings from this study indicate that long-term influences – family (exposure to family deviance), psychological/personality, and peer factors (early childhood aggression, adolescent drug and alcohol use) – lead to the development of fairly stable, slowly changing differences among individuals in their potential for violence. Superimposed on these long-term differences in violence potential are short-term individual variations in violence potential. Anger, frustration, and situational opportunities were short-term motivating influences for violence. For many of the sample members that engaged in violence, chronic methamphetamine use had a disorganizing effect on their cognitive functions. Perceptual fields were narrowed, which in turn lead to distorted interpretations of behavior and reduced ability to use various coping devices in situations seen as threatening. For example, respondents indicated that language when intoxicated was more provocative, and language often "amped up" otherwise minor disputes into violent encounters.

Methamphetamine use often increased the stakes in everyday interactions, transforming them from nonchallenging verbal interactions into the types of "character contests" whose resolution often involved violence. Methamphetamine exaggerated the sense of outrage over perceived transgressions of personal codes (respect, space, verbal challenges), resulting in violence to exert social control or retribution. In addition, some people simply made bad decisions while high, leading to fights that might have been avoided in other circumstances.

A common theme in many of the respondent accounts is that the use of violence was seen as a legitimate method to avenge being "dissed." It was an attempt to regulate other people's knowledge and opinions about themselves and their friends. In many instances, particular aggressive actions (threats, identity attacks) on the part of the victim were associated with the same types of aggressive actions by the offender. These retaliatory actions were characteristically unplanned and evolved out of some personalized relationship with the victim.

A fairly common effect of methamphetamine was paranoia. Paranoia contributed to hostile attributions that created an air of danger and threat, leading to defensive or preemptive violence. Several sample members reported that their decision making within violent events was compromised. Perhaps the most common language

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

respondents used to describe their behavior was "loss of control." The respondents spoke in terms of "being out of control," "blowing up," or having an "outburst of rage."

The results suggest that methamphetamine use may heighten the risk for violence. Everyone we interviewed agreed that methamphetamine has clear abuse and violence potential. Almost all of our respondents knew people who had gone "too far" with methamphetamine even if they themselves had not. Of the 205 respondents, 27 percent (N=55) had committed violence while under the influence of methamphetamine. The violence of the majority of these respondents, however, was not confined to the drug use context. These sample members were involved in a wide range of nondrug crimes, including both property and violent offenses. They also were involved in patterns of multiple drug use. Their patterns of drug use and crime suggest a configuration of spuriously related behaviors indicative of a generalized pattern of deviance. All but 4 of the 55 respondents evidenced multiple patterns of drug use and previous violence.

Furthermore, it is crucial to reiterate that we could find no evidence of a single, uniform career path that all chronic methamphetamine users follow. Progression from controlled use to addiction is not inexorable. A significant number of sample members experienced limited or no serious social, psychological, or physical dysfunction as a result of their methamphetamine use. Most germane to this study, we found that violence is not an inevitable outcome of even chronic methamphetamine use.

Our findings suggest clearly that pharmacology is not destiny. As Fagan (1993) and Zinberg (1984) have shown, the interaction between the pharmacological properties of a substance and the physiological characteristics of a user accounts for only part of a drug's effects. Drug effects and outcomes are mediated by users' norms, values, practices, and circumstances. No matter how seductive methamphetamine is, it is always used in social contexts that shape how it is used and what its effects are taken to mean by users.

The variation in intoxicated behaviors within social contexts suggests that the context itself exerts a powerful influence on the violence outcomes of methamphetamine situations. This study has shown that the importance of social context for methamphetamine-related violence lies in the mediating processes that shape behaviors as well as in the specific interactions leading to violence between offenders and victims. Violent behavior resulted from a complex interaction among a variety of social, personality, environmental, and clinical factors whose relative importance varied across situations and time.

It will be important in future research to carefully disentangle the interactive factors that contribute to a specific violent act. For example, one of the current controversies in clinical drug research is differentiation of substance abuse problems from other personality disorders. Accordingly, the etiology of compulsive intoxication

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

also may be etiologically relevant to other types of personality or psychiatric disorders that in turn mediate aggression. Whether aggression follows intoxication depends in part on the psychological processes that either precede substance use or are intensified following use. The complexity of the interaction of substance abuse and personality disorders does suggest the need for longitudinal research that can trace their mutual development and interaction across time. Such research should include the following: severity, frequency, timing, and recency of violent behavior; precipitating life events, targets, location, context, and consequences; presence of psychiatric disorders and active symptoms; substance use and intoxication at the time violent behavior occurs; and subject's interpretation of violent episodes. The research should continue to take a life historical approach in attempting to reconstruct the key influences on the identity formation and development of persons who later commit violent acts toward others.

Note

[1] The 1998 National Household Survey on Drug Abuse estimated that 4.7 million Americans estimated that 4.7 million Americans tried methamphetamine in their lifetime. This figure shows a marked increase from the 1994 estimate of 3.8 million. According to the Drug Abuse Warning Network (DAWN), methamphetamine-related emergency department episodes more than tripled between 1991-1997, rising from roughly 4,900 to 17,154.

References

Albertson, T., Walby, W., & Derlet, H.
1995 Stimulant-induced pulmonary toxicity. *Chest, 108,* 1140-1149.

Baskin, D., & Sommers, I.
1998 *Casualties of community disorder: Women's careers in violent crime.* New York: Westview Press.

Castro, F.
1997 Methamphetamine trends in five western states and Hawaii. *National trends in drug abuse*. Washington, D.C.: Office of National Drug Control Policy.

Clothier, P.
2002 The drug that makes users "crazy." *BBC News* (May 2). Retrieved February 8, 2006, from http://news.bbc.co.uk/1/hi/uk/1963574.stm.

Fagan, J.
1993 Set and setting revisited: Influences of alcohol and illicit drugs on the social context of violent events. In S. Martin (Ed.), *Alcohol and interpersonal violence: Fostering multidisciplinary perspectives*. Rockville, MD: U.S. Department of Health and Human Services.

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

Fagan, J., & Wexler, S.
1987 Crime in the home and crime in the streets: The relation between family violence and stranger crime. *Violence and Victims, 2,* 5-21
Farrington, D.
1998 Predictors, causes, and correlates of male youth violence. In M. Tonry & M. Moore (Eds.) *Youth violence: Crime and justice, Volume 24 (Crime and justice: A review of research)*. Chicago: University of Chicago Press.
Geertz, C.
1973 *The interpretation of cultures.* New York: Basic Books, Inc.
Gold, S.
2003 Breast milk cited in meth fatality. *Los Angeles Times,* January 20, p. B1.
Inciardi, J., Lockwood, D., & Pottieger, A.
1993 *Women and crack cocaine.* New York: MacMillan.
Katsumata, S., Sato, K., & Kashiwade, H.
1993 Sudden death due presumably to internal use of methamphetamine. *Forensic Science, 62,* 209-215.
Lattimore, P.
1997 *Homicide in eight U.S. cities: Trends, context, and policy implications.* Washington, DC: National Institute of Justice.
Lauritsen, J., Sampson, R., & Laub, J.
1991 The link between offending and victimization among adolescents. *Criminology, 20,* 265-291
Leinward, D.
2006 Meth cases put strain on ERs: Leading cause of drug-related visits. *USA Today,* January 18, p. A1.
Morgan, P.
1997 Methamphetamine trends in five western states and Hawaii. *National trends in drug abuse*. Washington, D.C.: Office of National Drug Control Policy.
National Institute on Drug Abuse
2003 Monitoring the future: National results on adolescent drug use. Bethesda, MD: National Institutes on Health.
National Institute on Drug Abuse and University of Michigan
2003 *Monitoring the Future national survey results on drug use, 1975-2002: Volume II. College students & adults ages 19-40*.
Pasternak, J.
1998 Meth kids: Heartland's tragic tale. *Los Angeles Times,* May 29, p. B1.
Schwartz, N.
2001 A rural epidemic: Meth fueling child abuse. *Los Angeles Times,* May 7, p. B1.

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016

Schwartz, N.
2001 A rural epidemic: Meth fueling child abuse. *Los Angeles Times,* May 7, p. B1.
Sommers, I. & D. Baskin
2004 *The social consequences of methamphetamine use*. New York: Edwin Mellen Press.
Sommers, I., Baskin, D., & Fagan, J.
2000 *Workin' hard for the money: The social and economic lives of female drug dealers.* Nova Science Press.
Substance Abuse and Mental Health Services Administration
2004 *Results from the 2003 National Survey on Drug Use and Health: National Findings*. Office of Applied Studies, DHHS Publication No. SMA 04-3964, Rockville, MD.
Williams, J.
2002 Meth wreaks havoc across U.S. *BBC News* (June 25). Retrieved February 8, 2006, from http://news.bbc.co.uk/1/hi/world/americas/2023387.stm
Zinberg, N.
1984 *Drug, set and setting: The basis for controlled intoxicant use.* New Haven: Yale University Press.

Downloaded from jod.sagepub.com at PENNSYLVANIA STATE UNIV on September 17, 2016