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Methamphetamine Use and Criminal Behavior

Michael C. Gizzi

Illinois State University, mgizzi@ilstu.edu

Patrick Gerkin

Grand Valley State University, gerkinp@gvsu.edu

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Michael C. Gizzi¹ and Patrick Gerkin²

Abstract

This research seeks to broaden our understanding of methamphetamine's (meth's) place within the study of drugs and crime. Through extensive court records research and interviews with 200 offenders in local jails in western Colorado, this research contributes to the creation of a meth user profile and begins to identify the place of meth in the drug–crime nexus. The study compares the criminal behavior of meth users with other drug users, finding that meth users are more likely than other drug users to be drunk or high at the time of arrest and claim their crimes were related to drug use in other ways. A content analysis of criminal records demonstrates that meth users have more extensive criminal records and are more likely than other drug users to commit property crimes.

Keywords

methamphetamine, drug crime nexus, interviews, court records, property crime

Introduction

A strong relationship between alcohol or illicit drug use and various forms of crime has long been presumed; however, the evidence to support such a claim is mixed and just what that relationship is has proven difficult to distinguish. What complicates this issue is the fact that the relationship is likely different for different drugs. Of course the drug itself is not the only significant variable to consider. Drug potency, the size of the dose, body composition, personal drug tolerance, and the social context in which the drug is consumed are all likely to influence the pharmacological and compulsive effects of a drug. These factors, among many others, are key to understanding the relationship between drugs and crime.

¹Illinois State University, Normal

²Grand Valley State University, Grand Rapids, Michigan

Corresponding Author:

Michael C. Gizzi, Department of Criminal Justice Sciences, Illinois State University, Normal, IL 61790-5250
E-mail: mgizzi@ilstu.edu

This research contributes to the small, but growing, knowledge about the place of methamphetamine (meth) in the drug–crime nexus. This research offers findings based on interviews with 200 offenders housed in local jails and one community corrections program in western Colorado and court records research. Based on the findings presented here, we believe that the place of meth in the drug–crime nexus is likely different from that of marijuana or alcohol.

Drugs and Crime

Despite the complicated nature of the relationship between drugs and crime, much research has accumulated over the years on the subject, which is documented by a wealth of official statistics. Data from the Arrestee Drug Abuse Monitoring Program (ADAM, 2003) indicates that a median of 67% of offenders from all data collection sites tested positive for cocaine, marijuana, meth, opiates, or phencyclidine (PCP) at the time of arrest. A median of 23.4% from all sites tested positive for multiple drugs from the list. When the list was expanded to include barbiturates, benzodiazepines, methadone, and propoxyphene, the median climbs to 70.3%. Evidence of disproportionate drug use among arrestees continued with the ADAM II research (2008). The results of ADAM II, which included 10 sites across the United States, showed that a majority of booked arrestees in each site tested positive for at least one illicit drug; from 49% (Washington, D.C.) to 87% (Chicago). The most common substances present, in descending order, were marijuana, cocaine, opiates, and meth. However, the list varied depending on the site, with specific regional variations in meth use which was more common in the two western sites.

According to the Bureau of Justice Statistics (1997a, 1997b), almost one quarter (22%) of federal prison inmates and one third of state prison inmates reported being under the influence of drugs at the time of their offense. For state prison inmates convicted of robbery, burglary, and motor vehicle theft, the figure was 40%. Furthermore, 27% of those serving sentences in state and federal prisons for robbery and 30% to 32% of those serving a sentence for burglary stated that they had committed their offense to secure money to buy drugs (Bureau of Justice Statistics, 1991a, 1991b).

In her research on drugs and consensual crime, Hunt (1990) reports that persons who abuse drugs, particularly expensive drugs such as heroin or cocaine, “are more likely than nonusers to be involved in a lifestyle that includes a great variety of illegal activities, from property offenses to confidence games and prostitution” (p. 159). However, Hunt goes on to caution, as many others have, that a majority of the drug users in this country are not involved in these crimes.

There are numerous studies of the role that heroin and crack-cocaine play in street crime (Benson, Kim, Rasmussen, & Zuehlke, 1992; Inciardi & Pottieger, 1994; Kaplan, 1983). The literature strongly suggests that drug use is often responsible for other nondrug crimes, including homicides, assault, and property crime (Inciardi, 1979; Manzoni, Brochu, Fischer, & Rehm, 2006; Martin, Maxwell, White, & Zang, 2004; Mendes, 2000). Chaiken and Chaiken (1990) summarize an array of research on

the drug–crime nexus and conclude that among drug users, high levels of drug use are associated with high levels of crime and low levels of drug use are associated with low levels of crime. They observe that “certain types of drug abuse are strongly related to offenders’ committing crime at high frequencies—violent crimes as well as other, income producing crimes” (p. 205). They go on to note that this relationship applies to various population subgroups, including groups defined by age, race, or sex.

Several studies have sought to explore the link between drugs and alcohol and rates of violent crime. Brownstein, Baxi, Goldstein, and Ryan (1992) revealed that drugs are a salient factor in homicides. Their research suggests that drugs may be involved in as many as one half of all homicides. Verano, McCluskey, Patchin, and Bynum (2004) also found a link between drugs and homicide. They collected data on 175 homicides that occurred in the city of Detroit between January 1999 and December 2002. The researchers coded various characteristics of the homicide including demographic characteristics of the victims and offenders, criminal histories, and spatial characteristics of the event including the date, time, and location of the event. Using a measure of drug relatedness, observed from the official homicide case files, Verano et al. concluded that “drugs play an important role in violent interactions” (p. 384). Their research suggests that even individuals involved on “the periphery of the drug trade, are at risk for violence emanating from that illicit activity” (p. 382).

However, research conducted by Valdez, Kaplan, and Curtis (2007) suggests otherwise. Their research examined the associations between aggressive crime, alcohol and drug use, and concentrated poverty. Their data were drawn from the 1992 Drug Use Forecasting (DUF) program that included data from 24 cities, both large and small. The DUF data provided measures of violent and aggressive crime as well as urinalysis results from drug testing and self-reported alcohol use. According to the researchers, a positive test for drug use was negatively associated with the occurrence of aggressive crimes. Conversely, self-reported alcohol use was found to have a strong and robust positive effect. Moreover, their findings supported their hypothesis that “social attachments to marriage and the labor force are the principal individual-level pathway mediating the substance abuse/aggression nexus” (p. 600).

Goldstein and the Drug–Crime Nexus

Throughout the late 1980s, in a series of articles, Paul Goldstein offered a framework for categorizing the types of crime that are related with drug use. Over the years, Goldstein’s three-part framework has been enormously influential to the study of the causal connections between drug use and crime. Goldstein’s framework includes the categories of pharmacological violence, economic-compulsive crime, and systemic violence. Although Goldstein’s taxonomy continues to be widely cited as a model for understanding the various relationships between drug use and crime, it is not without criticism. According to MacCoun, Kilmer, and Reuter (2003), the relationship between drug use and crime is too complicated to be explained by a single framework. Others, including Bennett and Holloway (2009), have noted that Goldstein’s taxonomy needs

to be refined to include consideration of the wide range of factors that are known to influence the relationship between drugs and crime.

It is the aim of this research to begin addressing some of these concerns. Specifically, this research is focused on the place of a single drug, meth, in the drug-crime nexus. There has, to date, been little research on how this drug fits into the drug-crime nexus offered by Goldstein. What follows is a brief discussion of Goldstein's framework and what little research there is on the place of meth within it.

Pharmacological violence is based on the idea that "some individuals, as a result of long-term ingestion of specific substances, may become excitable, irrational, and may exhibit violent behavior" (Goldstein, 1985, p. 494). Although some question whether pharmacological violence is responsible for much violent crime among drug users (see MacCoun et al., 2003), there may be good reasons to believe that meth is different from other drugs. Sommers and Baskin (2006) found that 55 of 205 meth users surveyed (26.8%) committed more than 80 acts of violence while under the influence of meth. In addition, there is some clinical evidence that meth use may increase the likelihood of "attack behaviors and aggression in humans" (Cartier, Farabee, & Prendergast, 2006, p. 43).

The economic-compulsive crime model suggests that drug users commit crimes to finance their drug habit. This part of Goldstein's framework has been examined extensively in the past 20 years, primarily for heroin and cocaine use (see, e.g., Nurco, 1998; Nurco, Shaffer, Ball, & Kinlock, 1984). The economic motivation model seems to have more explanatory power for individuals who had no criminal behavior prior to substance abuse than for individuals who engaged in crime prior to drug use. To date, there are no studies that look at how meth users fit into the economic-compulsive model, although surveys by the National Association of Counties suggest that law enforcement officials believe the two are closely related (National Association of Counties, 2006).

Systemic violence is the violent crime that comes from the illegal drug market itself, including disputes between drug dealers, assaults and homicides committed within "dealing hierarchies as a means of enforcing normative codes," and other robberies and crime related to the illegal drug market (Goldstein, 1985, p. 497). White and Gorman (2000) suggest that the systemic violence model probably accounts for much of the violence attributed to drug use.

Here too, there are no studies that specifically examine whether meth is similar to cocaine or heroin in the context of systemic violence. Meth has been manufactured by small-time "meth cooks," who produce meth for personal use and small-scale distribution, and by drug cartels that produce meth on a much larger scale, in "super-labs." The popular conception of meth use is tied to the image of the small-time cook (see Sexton, Carlson, Leukefeld, & Booth, 2006; Weisheit & White, 2009), yet today the majority of meth comes from Mexican drug trafficking organizations operating super-labs in Mexico (National Drug Intelligence Center, 2008; Owen, 2007; Suo, 2004, 2005).

The ADAM II annual report (2008) concludes that meth use continues to be primarily a regional phenomenon. Meth use in the eastern United States remains low, with less than 1% testing positive. There were slightly higher rates in Indianapolis,

Minneapolis, and Washington, D.C. In the two western sites of Sacramento and Portland, 35% and 15%, respectively, tested positive at the time of arrest.

One final study compared the adolescent profiles of young amphetamine users to that of nonusers in the eastern United States and Canada (Hawke, Jainchill, & DeLeon, 2000). Amphetamine users showed greater use of a wider variety of drugs and were found to be more criminal than their non-amphetamine-using counterparts. Specifically, amphetamine users reported greater involvement in both petty and serious crimes, including property crimes, drug sales, and serious violent crimes.

Although psychologists and the medical community know a great deal about the pharmacological and epidemiological consequences of meth (see Weisheit & White, 2009), meth remains an understudied topic among criminal justice scholars interested in drugs and crime. Weisheit and Fuller (2004) provide an early look at meth's spread into the Midwest, focusing on meth production in rural areas. Sommers, Baskin, and Sommers (2007) look at the relationship between meth and violent crime through interviews with 30 meth users in Southern California. Their findings support the hypothesis that meth users may be more likely than other drug users to commit acts of violence. Sexton, Carlson, Leukefeld, and Booth (2008), Sexton et al. (2005), and Sexton et al. (2006) have looked at patterns of meth use and production in the rural South through longitudinal ethnographic interviews with small numbers of users. Listwan, Shaffer, and Hartman examined meth treatment in drug courts (2008), and found that drug of choice does not influence drug court outcomes. In their study comparing meth users to other drug users in urban and rural drug courts, Stoops, Tindall, Mateyoke-Scriver, and Leukefeld (2005) found differences between meth users and other drug users in terms of their drug-use profile, their psychological functioning, self-reported criminal activity, and criminal history. They found that meth users were more likely to use other drugs than non-meth drug users, although this was true for urban and not rural meth users. They also found that meth users were more likely than nonusers to engage in property crimes.

Although this research is important, and provides a starting point for placing meth in the drug-crime nexus, an important piece is missing. With the exception of these few studies, we know little about how meth fits into the broader literature on drugs and crime. This research begins to explore some of the questions about the place of meth in the drug-crime nexus.

Research Methods

Western Colorado provides a perfect setting for our research because it includes a mix of both rural and urban settings, including one metropolitan statistical area. It is a region that has experienced a significant meth problem, with as much as 80% of all felony drug cases involving meth in the 4 years preceding the study (Gizzi, 2008; Gizzi & Gerkin, 2007). Although the region historically was plagued with meth labs, none of these counties have had significant meth lab seizures in the past 5 years.

Almost all of the region's meth comes from Mexican drug trafficking organizations funneled through the Southwest.

The primary methods used for this research included structured interviews and court records research for each individual interviewed. The primary goal of this research was to examine the history of drug use and criminal behavior for each participant. The interview protocol was designed to create an in-depth, chronological history of drug use and criminal behavior. Data collected included the variety of drugs used and criminal behaviors committed, the extent of drug use, drug of choice, methods of ingestion, and participant perception of the relationship between their drug use and other crimes.

Sample

Participants in this research were housed in one of five local jails in western Colorado between June 2007 and November 2007. One additional sample was collected from community corrections clients in Mesa County, Colorado. Sheriffs in each county gave the researchers permission to conduct the study in their facilities. As meth users were of particular interest to the researchers, local jail populations emerged as attractive samples for this research. Given the high percentage of drug cases involving meth charges in these counties (Gizzi, 2008), it was reasonable to assume that inmate interviews would provide contact with many meth users in the region.

Because of the sensitive nature of the subject of this research and the difficulty of creating a suitable sampling frame, this research has used convenience sampling. As this research uses a nonprobability sample, the authors have recognized the limitations of the findings herein. We have deliberately opted to trade the strong external validity that accompanies a representative sample for the strong internal validity that is achieved with a rigorous collection of data from a purposive sample. We recognize the limitations for generalizing our findings to other populations. However, our use of a convenience sample does not detract from the associations between meth use and various forms of crime.

All inmates, except for those housed in the maximum-security pods, were eligible for participation. A corrections officer read a recruitment sheet to the inmates in the dayroom, and a sign-up sheet for interviews was posted in a common area of each respective dayroom. After several days, the researchers returned and interviews were conducted with the individuals who had signed up. Inmates could sign up for an interview until all interviews were completed and the researchers had moved to another pod or facility. Interviews were conducted in each pod over a 2- to 3-day period. Eligible participants included those who were serving their sentence in the facility and those awaiting trial. Both the corrections officer and the researchers informed the participants that the researchers were not employed by the criminal justice system and assured the participants that their responses would remain confidential. Combined, the various samples contain 200 unique individuals, including both males and females.

Data Collection

All of the interviews, except in one facility, were conducted in a private room located adjacent to and attached to the dayroom. Despite a rule in each facility requiring that the door remained cracked, this environment did provide a level of privacy to the interview setting. In one facility, the interviewers were not allowed to enter the dayroom and thus the interviews were conducted via telephone in the inmate visitation room. One might suggest that this would lead to apprehension on the part of the participants to speak freely about past drug use or crimes. However, the researchers saw no change in the demeanor of these participants and the dynamics of these interviews appeared to be the same as those interviews conducted in person, in a private setting. Interviews lasted between 15 and 40 minutes apiece, although most were completed in approximately 40 minutes.

In addition to the self-reported data, detailed criminal history data were collected and were used to compare how meth users differ from other drug users. Each participant's criminal record was extracted from the Lexis-Nexis Colorado Court link database by a Data Analyst employed by the Mesa County District Attorney's Office. The Data Analyst position was funded by a COPS Methamphetamine Initiative Grant, which made it possible to collect much more complete criminal history data than would have been possible if we were forced to request criminal history files from individual court clerks. The Lexis-Nexis Colorado Court link database provides access to complete criminal history records for Colorado criminal cases, including juvenile, misdemeanor, and felony filings. The criminal history data provided is comprehensive, listing all charges in each filing and the resolution of each charge, complete with sentencing data. The criminal history data was entered into a free-text database (askSam), which was queried by the coinvestigators. Each individual's lifetime criminal history was coded and analyzed by criminal charge categories. It was not possible to find criminal history data on 37 inmates who completed consent forms but provided names that did not correspond with anyone in the Colorado court records or who gave names that could not be uniquely identified. As a result, criminal history data were analyzed for 163 of 200 participants (81.5%).

Classifying Drug Users

The primary goal of this research is to be able to compare meth users with other drug users in terms of the relationship between meth use and crime. To identify the meth users in the study, we began by dividing the sample between those who reported having used meth and those who had never tried it. This resulted in a split of 169 who had tried meth and 31 who had not. Although lifetime meth use was interesting, most of our respondents had used many drugs (the average was 3.5 drugs per person), including meth, marijuana, cocaine, heroin, and other drugs. We wanted to be able to distinguish those individuals who were regular meth users from those who were not. We used two questions from the interview to make this distinction. First, we asked

Table 1. Drug of Choice and Drug Used Most Often

	What is your drug of choice?		What is the drug you used most often?	
	No.	%	No.	%
Methamphetamine	70	35	60	30
Marijuana	70	35	86	43
Alcohol	25	13	30	15
Cocaine	12	6	11	6
Other	14	7	7	4
None	9	5	6	3

each offender what their drug of choice was. The results showed an even split between meth and marijuana users, with 70 individuals declaring each as their drug of choice. Twenty-five individuals said alcohol was their drug of choice and 26 individuals said it was one of a handful of other drugs. Table 1 shows the breakdown of results.

The next question posed to our participants was, "What drug did you use most often?" Here the results were slightly different. As Table 1 shows, 86 individuals said they used marijuana most often, 60 said meth, 30 said alcohol, and the remainder ($n = 18$) identified other drugs, with 6 not responding to the question. With the results from these questions, we proceeded to do a second sorting of the 169 individuals who admitted to lifetime meth use. Those who said meth was their drug of choice or the drug they used most often were grouped together in one group (A). Anyone else who said that they had at least tried meth was placed in a second group (B). The 31 individuals who claimed to have never used meth were placed in a third group (C). This resulted in three categories of users, with 80 in group A, 89 in group B, and 31 in group C.

Using these three groups, we then compared the responses to the questions about drug of choice, drug used most often, frequency of drug use, and whether the individual considered himself or herself a drinker (Table 2). Group A, which consisted of those who claimed meth was their drug of choice or the drug used most often, was clearly distinguishable. Of the 80 individuals in this group, 87.5% ($n = 70$) indicated meth was their drug of choice. Sixty of the 80 individuals (73.3%) claimed that meth was also the drug they had used most often. Finally, 77.5% ($n = 62$) of the members of Group A reported drug use as occurring daily. That number increased to 88% when we included those who reported drug use more than once a week. Only 4 individuals claimed just weekly use, and 5 reported drug use a couple times per month. Of the 80 individuals in Group A, only 28 (35%) considered themselves drinkers. Given these results, we have identified Group A as regular meth users.

The second group in our study consisted of all participants who had tried meth during their lifetime but did not describe it as either their drug of choice or the drug they had used most often. Of these individuals, 60.7% ($n = 54$) claimed marijuana was

Table 2. Drug Use Comparison Groups

	Total, N = 200		Non-meth drug user, n = 31		Lifetime meth user, n = 89		Regular meth user, n = 80	
	No.	%	No.	%	No.	%	No.	%
What is your drug of choice? ^a								
Methamphetamine	70	35					70	87.5
Marijuana	70	35	11	35.5	54	60.7	5	6.2
Alcohol	25	13	10	32.3	14	15.7	1	1.2
Cocaine	12	6	3	9.7	8	9.0	1	1.2
Other	14	7	3	9.7	9	10.1	2	2.4
None	9	5	4	12.9	4	4.5	1	1.2
What drug did you use most often? ^b								
Methamphetamine	60	30					60	75.9
Marijuana	86	43	11	35.5	59	66.3	16	20
Alcohol	30	15	10	32.3	19	21.3	1	1.3
Cocaine	11	6	3	9.7	7	7.9	1	1.3
Other	7	4	3	9.7	3	3.3	1	1.3
No answer	6	3	4	12.9	1	1.1	1	1.3
How often did you use drugs? ^c								
Once a month	6	3.1	5	20	1	1.2	0	3.1
A couple of times per month	8	4.2	0		3	3.5	5	4.2
Weekly	9	4.7	1	4	4	4.7	4	4.7
More than once per week	28	14.7	7	28	12	14	9	14.7
Daily	140	73.3	12	48	66	76.7	62	73.3

Note: meth = methamphetamine.

a. $\chi^2 = 180.31, p < .001$.

b. $\chi^2 = 160.702, p < .001$.

c. $\chi^2 = 34.418, p < .001$.

their drug of choice, whereas 15.7% ($n = 14$) reported that their drug of choice was alcohol. Some 19.1% ($n = 17$) reported their drug of choice as either cocaine ($n = 8$), ecstasy, heroin, LSD, or other. Of those in Group B, 66.3% ($n = 59$) reported marijuana was the drug they used most often, with another 21.3% ($n = 19$) reporting alcohol for most frequent use. Finally, when Group B is examined for frequency of drug use, 76.7% ($n = 66$) reported daily drug use, and 14.0% reported more than once a week. Only 1 individual in Group B reported monthly drug use, whereas 3 reported a couple times per month, and 4 reported weekly. Like Group A (regular meth users), the individuals in Group B appear to be frequent drug users, who are predominantly marijuana users or drinkers. Indeed, 61.8% ($n = 55$) of the members of Group B described themselves as drinkers. We describe the individuals in Group B as lifetime meth users. The members of this group are regular drug users and they admitted to having tried meth, but they do not appear to be regular meth users.

The final group in our study consisted of 31 individuals who reported never having tried meth. This group included 5 individuals who reported no lifetime drug use, and was split almost evenly between those who claimed marijuana as drug of choice ($n = 11$, 35.5%) and alcohol ($n = 10$, 32.3%). Perhaps more importantly, only 48% ($n = 12$) reported daily drug use. Twenty percent of those responding ($n = 5$) claimed monthly use, only 1 individual reported weekly use, and 7 (28.0%) reported use more than once a week. Members of Group C were the most likely ($n = 20$, 64.5%) to describe themselves as drinkers. We have chosen to label this group “non-meth users.” The group also appears to consist of the least serious drug users in the study.

Based on these groupings, we have analyzed the interview data using a combination of chi-square tests and ANOVAs. All variables studied used the regular meth user group as the fixed factor. We considered results statistically significant at $p < .05$.

Demographics

The sample provided a mix of individuals who considered themselves meth, marijuana, or alcohol users. There were few cocaine and even fewer heroin users. This was consistent with what we know about drug use in western Colorado (Gizzi, 2008). Demographically, the sample consisted of 155 men (77.5%) and 45 women. Seventy-five percent were Caucasian ($n = 150$), and 19% ($n = 38$) identified themselves as Hispanic. There were only a handful of African Americans, American Indians, or Asians. Forty-four percent ($n = 88$) of offenders were high school dropouts, although 31 offenders (15.5%) had GEDs. Thirty-six percent ($n = 73$) had some college education. The mean age of offenders studied was 32 and the median was 29. Table 3 provides a summary of the demographics of the sample. Gender was the only demographic variable that showed a statistically significant difference between groups. A larger proportion of regular meth users were female. Although 16% of lifetime meth users were female, 28.8% of regular meth users were female ($p < .05$). Although these differences were significant, the small number of women in the sample makes it difficult to generalize about these findings.

There were differences between groups of users in relation to poly-drug use and age at first use of drugs. The participants in the sample can be described as poly-drug users. In this context, poly-drug use refers to the past or present use of multiple psychoactive drugs over time or concurrently. More than 90% of offenders studied had used more than one type of illicit drugs. Ninety-three percent of offenders ($n = 186$) had used marijuana, 85% ($n = 169$) had used meth, and 84% had used cocaine. Only 30% had used heroin and 63% had used other drugs (e.g., LSD, mushrooms, speed, vicodin, hash). The mean offender had used 3.5 different types of drugs over their lifetime. There were statistically significant differences between meth users and non-meth drug users in terms of poly-drug use ($p < .001$). The mean number of drugs used by regular meth users was 3.94, whereas the mean number for non-meth drug users was 1.67. Lifetime meth users were similar to regular meth users, with a mean number of 3.87.

Table 3. Demographics

Demographics	Total, N = 200		Non-meth drug user, n = 31		Lifetime meth user, n = 86		Regular meth user, n = 80	
	No.	%	No.	%	No.	%	No.	%
Gender^a								
Male	155	77.5	25	80.6	73	82	57	71.3
Female	45	22.5	6	19.4	16	18	23	28.8
Race								
Caucasian	150	75.4	22	71.0	63	71.6	65	81.3
Hispanic	38	19.1	7	22.6	20	22.7	11	13.8
African American	3	1.5	1	3.2	2	2.3	0	
American Indian	7	3.5	1	3.2	3	3.4	3	3.8
Asian	1	.5	0		0		1	1.3
Education								
Dropout	57	28.5	6	19.4	31	34.8	20	25
GED	31	15.5	5	16.1	11	12.4	15	18.8
High school	39	19.5	3	9.7	21	23.6	15	18.8
Some college	73	36.5	17	54.8	26	29.2	30	37.5
Age								
Mean	32.1		35.5		31.45		31.42	
Median	29		34		28		29	
Youngest	18		18		18		20	
Oldest	62		62		59		56	

Note: meth = methamphetamine.

a. $\chi^2 = 174.7, p < .001$.

Offenders were asked to identify the first illicit drug they had used and the age at which they first used their drug of choice. Eighty percent reported that marijuana was the first drug used. Ten offenders (5%) said it was meth, 9 said alcohol, and 8 said cocaine. When compared by groups of users, there are statistically significant differences. Offenders who had never used meth had their first experience with illicit drugs at 16.19 years, lifetime meth users first used drugs at 13.51 years, and regular meth users were 14.45 years old ($p < .01$).

Results

To better understand the relationship between drug use and criminal behavior, we first looked at qualitative interview questions, and then examined the criminal history of each individual in the study to explore the differences among the three groups of drug users. Participants were asked three questions about the relationship between drug use and criminal behavior. We first inquired whether “you were drunk or high at the time of your arrest?” We then asked, “Was your drug use related to your current offense?”

Table 4. Drug Use and Criminal Behavior

	Total		Non-meth drug user		Lifetime meth user		Regular meth user	
	No.	%	No.	%	No.	%	No.	%
Were you drunk or high at the time of your arrest?*								
Yes	122	62.6	12	44.4	53	60.2	57	71.2
No	73	37.4	15	55.6	35	39.8	23	28.8
Total	195							
Was your crime related in some other way to your drug use?*								
Yes	50	51	9	33.3	41	46.1	50	62.5
No	96	49	18	66.7	48	53.9	30	37.5
Total	146							
Content analysis of how crime was related								
Drug related*	43	48.9	1	14	14	43.8	28	57.1
Alcohol related***	18	20.5	5	71.4	11	34.4	2	4.1
Property crime*	22	25	1	14	5	15.6	16	32.7
Violent crime	5	5.7	0		2	6.3	3	6.1
Total	88		7		32		49	

Note: meth = methamphetamine.

* $p < .05$. *** $p < .001$.

Finally, for those who answered yes, we asked them to describe how it was related. The results of these analyses are summarized in Table 4.

More than 60% of all offenders stated that they were drunk or high at the time of arrest. There are statistically significant differences between groups of meth users. Only 44.4% of non-meth users were drunk or high at the time of arrest, compared with 60.2% of lifetime meth users, and 71.2% of regular meth users ($p < .05$). This is important for two reasons. First, it supports law enforcement claims that numerous crimes are committed by active meth users. Second, it is consistent with the ADAM studies, which showed that high percentages of arrestees were high on meth at the time of their arrest (ADAM, 2003).

How Drugs Were Related to Current Offense

Meth's place in the drug-crime nexus becomes more evident when crime and drug use is explored. When asked if their drug use was related to their criminal offense in some

other way, exactly 50% of the 200 offenders studied responded in the affirmative. Here too, there are significant differences between the groups. Although only 33.3% of non-meth drug users said their crime was related to drug use, that number increases to 46.1% for lifetime meth users, and 62.5% for regular meth users ($p < .01$). We did a content analysis of the responses to this question. Responses were coded into types of offenses, sorted by the three groups of drug users. The variables included drug charges (possession, distribution, or intent to distribute), property crimes, violent crimes, and crimes related to alcohol. We used the statutory identifiers from the criminal code for each type of offense, and queried the database to identify the number of specific charges in each individual's history. In addition, when possible, crimes were coded as systemic violence, economic-compulsive crime, or pharmacological violence.

Regular meth users were the most likely to have their charges involve drug offenses. Drug possession and distribution charges represented 48.9% of all responses. For regular meth users, drug charges accounted for 57.1% of responses, 43.8% of lifetime meth users, and just 1 non-meth user (14.0%). The differences were significant at $p < .05$. Of the 43 drug charge responses, 28 (65.2%) were possession charges. The most common responses were "I was caught with less than a gram of meth" or "I was selling drugs."

The second largest category of responses were property crimes ($n = 22$, 25%). There were statistically significant differences between the groups at $p < .05$. Property crimes were reported by 32.7% of regular meth users, 15.6% of lifetime meth users, and by 1 non-meth drug user. Comments indicating property crimes included responses like "I was going to trade stolen lobster tails for drugs," "I robbed a house for money to buy drugs," and "I was stealing weapons to pay for meth." Of the 16 property crimes described by regular meth users, 11 could be characterized as fitting under the economic-compulsive model of the Goldstein framework. In each instance, the participant described the crime as being committed solely to finance his or her drug habit. In addition, one drug offense fit into the economic-compulsive model—"I was a drug dealer, and dealing was the easiest way to supply my habit." Overall, 28% of the offenses described by regular meth users could be described as economic-compulsive crimes.

Crimes related to alcohol represented the next largest category of responses ($n = 18$, 20.5%). With the exception of one "Minor in Possession," all of the alcohol offenses were described by participants as "DUIs" (or driving under the influence). There were significant differences between groups at $p < .001$. Although 71.4% of non-meth drug users ($n = 7$) described their crimes as being alcohol-related, the more interesting comparison is between lifetime and regular meth users. Alcohol was the single-largest response ($n = 11$, 34.4%) given by lifetime meth users. Yet by contrast, alcohol was the single smallest category for regular meth users ($n = 2$, 4.1%). Thus, the lack of alcohol offenses by regular meth users is consistent with responses to a separate survey question "Do you consider yourself a drinker?" Although 64.5% of non-meth drug users and 61.8% of lifetime meth users described themselves as drinkers, only 35% of regular meth users considered themselves a drinker ($p < .001$).

There were very few violent offenses described by the participants. Three regular meth users and two lifetime meth users described violent crimes; four assaults and one shooting. The three violent crimes committed by regular meth users included a fight with an ex-wife that turned into a domestic situation, a vehicular assault described as "I hit my ex-wife with a car while on meth," and an attempted murder was described as a shooting where the offender "thought the kid had narked on someone." It was difficult to confidently code any offenses as pharmacological violence, although four crimes described by regular meth users were categorized as falling under systemic violence. These are crimes that stem from the illegal trade in drugs. In addition to the above-described attempted murder, these included "loan sharking and collecting drug debts from people," "chasing after people that narked on me for selling drugs," stealing a gun "out of a bounty hunter's truck," and running from the police, resulting in a "high-speed chase."

Criminal History Analysis

The final component of the analysis was focused on the actual criminal record of each offender. A content analysis of offender's criminal record yielded information on both total cases and total charges in each individual's history. By comparing criminal history data by meth use groups, it enables us to examine how the meth user group compares to the other groups in terms of criminal behavior. We collected data on both total criminal filings (cases) and total criminal charges in each individual's record. An arrest results in a criminal filing or case, and each case can include numerous charges. Of the two, the charge data provided a more complete picture of criminal involvement. We counted every single charge in each offender's history, including charges that were dismissed through guilty plea agreements. There are some limitations in the data; juvenile offenses that were deferred by the District Attorney's office without charges do not show up in the criminal history, nor do arrests where no charges were filed. These limitations are minor, however, and they apply to all of the cases studied.

Total Cases and Charges

The first variable examined is total number of cases, which are defined as court filings. Of the 163 cases for which a criminal history could be conducted, there were a total of 1,193 cases, with a mean of 7.3 cases each. There were no statistically significant differences among groups for the total number of cases. When we consider total charges filed, there were statistically significant differences at $p < .05$. The 1,193 cases included a total of 1,899 criminal charges, with a mean of 11.65 charges per offender. Regular meth users had a mean of 13.54 total charges in their criminal history, compared with 10.69 charges for lifetime meth users, and 9.04 charges for non-meth drug users ($p < .05$; Table 5). Regular meth users have a more extensive criminal history than either lifetime meth users or non-meth drug users. Part of the

Table 5. Charges in Criminal History

	Total		Non-meth drug user, N = 24	Lifetime meth user, N = 70	Regular meth user, N = 69	p
	N	M	M	M	M	
Total Charges	1,899	11.65	9.04	10.69	13.54	.05*
Total nondrug charges	1,335	8.19	7.42	7.21	9.45	.18
Drug charges	564	3.46	1.63	3.47	4.09	.003**
Possession, less than 1 g	135	0.83	0.38	0.70	1.12	.005**
Possession, more than 1 g	17	0.10	0.00	0.17	0.07	.047*
Distribution	43	0.26	0.08	0.23	0.36	.124
Marijuana possession (petty)	111	0.68	0.33	0.91	0.57	.012*
Paraphernalia	258	1.58	0.83	1.46	1.97	.006**
Total property crime charges	658	4.05	2.92	3.27	5.25	.011**
Total traditional property charges	538	2.15	1.58	1.6	2.91	.011**
Theft	223	1.37	1.04	1.00	1.86	.011**
Burglary	74	0.45	0.29	0.40	0.57	.243
Robbery	14	0.09	0.07	0.13	0.09	.313
Auto theft	37	0.23	0.25	0.13	0.32	.297
Fuel piracy	3	0.02	0.0	0.00	0.44	.126
Criminal mischief	95	0.58	0.38	0.67	0.57	.517
Trespass	87	0.53	0.46	0.51	0.58	.796
Arson	5	0.03	0.0	0.06	0.01	.348
Total financial property charges	120	0.74	0.50	0.43	1.15	.007**
Identity theft	7	0.04	0.0	0.43	0.06	.717
Financial transaction device	23	0.14	0.04	0.01	0.31	.007**
Fraud	5	0.03	0.04	0.01	0.04	.571
Forgery	43	0.26	0.29	0.17	0.35	.337
Criminal impersonation	42	0.26	0.13	0.19	0.38	.081
Total violent crime charges	452	2.77	2.63	2.74	2.86	.956
Assault	190	1.17	1.21	1.13	1.19	.975
Harassment	121	0.74	0.71	0.74	0.75	.988
Menacing	56	0.34	0.33	0.30	0.39	.704
Sex offence	21	0.13	0.13	0.19	0.07	.329
Child abuse	29	0.18	0.13	0.19	0.19	.783

Note: meth = methamphetamine.

* $p < .05$. ** $p < .01$.

explanation for this could be that regular meth users are serious drug users and are more likely to have more drug charges in their criminal history, which could skew the overall results. To control for that problem, we also examined only nondrug charges. This resulted in a mean of 8.19 charges for all offenders, which represented a 42% drop from the original mean of 11.65 charges per offender. When the differences among meth groups are considered, the results are not statistically significant ($p < .18$),

but the trend is still interesting. Regular meth users had 9.45 nondrug charges, lifetime meth users had 7.21, and non-meth drug users had 7.42 charges.

These results were consistent with the data collected on total drug charges. Non-meth drug users only had an average of 1.63 drug charges in their criminal history, whereas lifetime meth users averaged 3.47 and regular meth users averaged 4.09 drug charges each. These differences were statistically significant at $p < .01$. The majority of drug charges in criminal history were for drug paraphernalia ($n = 258$), petty-offense marijuana possession ($n = 111$), and possession of controlled substance, less than 1 g ($n = 135$). There were 17 distribution charges and 17 charges of possession of more than 1 g of a controlled substance. There were significant differences among groups for all drug categories except distribution charges. Regular meth users had the highest average number of charges for possession less than 1 g and drug paraphernalia, both significant at $p < .01$. Regular meth users also had the highest average distribution charges. Lifetime users had the highest average for marijuana possession, at 0.91. Non-meth users had an average of 0.33, and regular meth users averaged 0.57. This is consistent with the self-reported finding of these users that marijuana is the drug they use most frequently.

Meth Users and Property Crime

We looked at the total property crime charges in each offender's criminal record to explore whether meth users commit more property crimes than other offenders. One of the common hypotheses put forth by law enforcement is that areas infested by meth will have higher rates of property crimes because meth users will commit more property crimes to pay for their habit (National Association of Counties, 2006). The property crime data we collected lends some support to this hypothesis. Three variables were coded: total property crime charges, total traditional property crime charges, and total financial property crime charges. Traditional property crime charges included theft, burglary, robbery, criminal mischief, trespass, arson, and fuel piracy. The total financial charges included identity theft, possession of a "financial transaction device" (i.e., stolen check or credit card), fraud, forgery, and criminal impersonation. These charges were singled out because of law enforcement claims that these are the specific types of crimes that they equate with meth users. The results are presented in Table 5.

Of the 163 cases for which criminal histories could be conducted, 133 offenders had a total of 658 property crimes in their criminal history, with a mean of 4.04. There were statistically significant differences between groups of users at $p < .01$. Non-meth drug users had a mean of 2.92 property crimes, lifetime meth users had 3.27, and regular meth users had 5.25 property crime charges in their criminal history. When we looked at the subset of financial crimes, regular meth users averaged 1.15 financial crime charges, whereas non-meth drug users and lifetime meth users had an average of less than 1 ($p < .01$). Only the charge of possession of a financial transaction device ($n = 23$) had statistically significant differences among groups ($p < .01$). Criminal impersonation charges ($n = 42$) did not result in statistically significant

differences ($p < .081$), but regular meth users were the most likely to have these charges in their history.

There were statistically significant differences among the groups of users for traditional property crimes as well ($p < .01$). Non-meth drug users had an average of 1.58 traditional property crime charges, lifetime meth users averaged 1.6, and regular meth users averaged 2.91 traditional property crime charges. Out of 538 traditional property crime charges, 223 were coded as “theft,” which was the only category of traditional property crimes that had statistically significant differences between user groups. Non-meth drug users had a mean of 1.04 theft charges in their criminal history, whereas lifetime meth users had 1.0, and regular meth users had 1.86. There were no significant differences among users in any other traditional property crime categories. Although the findings lend support to the arguments that meth users are more likely to commit property crimes, the small N in this study suggests that further research is merited.

Meth Use and Violent Crime

The drug–crime nexus suggests two possible forms of violent crimes that may be committed by drug users: systemic violence (that related to the drug trade) and pharmacological violence (violent acts resulting from the pharmacological effects of the drug itself). Criminal history data does not allow us to distinguish between systemic violence and pharmacological violence, although it is possible to look at the number of violent crimes in each offender’s history. Data were collected on all instances of assault, kidnapping, sex offense, harassment, menacing, murder, endangerment, false imprisonment, and child abuse. There were 452 total charges in these categories, but there were no statistically significant differences among users in any categories. For example, although all offenders averaged 1.17 assault charges ($n = 190$) in their criminal history, regular meth users averaged 1.19, lifetime users averaged 1.13, and non-meth drug users averaged 1.21 assault charges. This held true across all variables (Table 5).

Most importantly, meth users were not more likely to commit violent crimes, a finding that is consistent with the interview responses collected. In fact, when the Crimes Against Persons variable was compared by drug of choice, marijuana users had the highest mean number of prior crimes against persons (3.17). Meth and alcohol users were identical with means of 2.7.

Discussion

The main purpose of this research was to begin to examine the place of meth in the drug–crime nexus. Although there is wealth of research on the drug–crime nexus, little of it has focused specifically on meth. Following the 2001 forum for researchers established by the National Institute of Justice, there has been a push for more specific research to examine the relationship between different kinds of drugs and the different types of crimes in Goldstein’s framework. The logic is that different drugs will likely

produce different effects on users and their likelihood of engaging in the different types of crimes that compose the drug–crime nexus. The findings presented here suggest that a further examination of the differences between meth users and non-meth drug users is warranted. Regular meth users are different in many ways, not only from non-meth drug users but also from those categorized as lifetime users of the drug. Meth users in our sample were far more likely to agree that their current charge was related to their drug use than non-meth drug users. They were also the most likely to claim they were drunk or high at the time of arrest for their current charge.

Because of the highly addictive properties of the drug meth, one might hypothesize that meth users would be similar in their criminality to the users of other highly addictive drugs such as cocaine. However, no such comparison exists in the literature as there have been few drug-specific studies completed to date, and particularly there is little known about meth users.

These findings suggest the drug–crime nexus may be different for meth than for other drugs. The criminal history records suggest that regular meth users have more extensive criminal involvements than the other offenders in the study, a finding also supported by Hawke et al. (2000). Unfortunately there was no sizable group of heroin or cocaine users to compare with meth users in this study as meth is the primary hard drug of choice in western Colorado. It would be useful to compare regular meth users with a similar group of regular cocaine or heroin users. Doing so would allow one to begin to construct drug-specific profiles and allow one to empirically demonstrate the different effects of various drugs on the types of criminal behaviors committed by the different users.

An examination of the current charges against our participants through the use of criminal records revealed further patterns in criminal behavior. Regular meth users were most likely to have their current offense be drug related. This is no surprise as our examination of court records revealed that regular meth users have more lifetime drug charges in their criminal histories and a history of more extensive drug use, a finding also reported by Hawke et al. (2000). Individuals identified as regular meth users were also the most likely to report that their current charges were related to a property offense. When we examine the results of the criminal history data, significant differences emerge in regard to property crimes. The overall proportion of property crimes in their criminal history was the highest for the regular meth user group. Statistically significant differences were also reported for those property crimes identified as financial crimes but not for traditional property crimes.

The content analysis of interview responses about how the participant's crime was related to drug use provide further support for the link between meth use and property crimes. More than 32% of regular meth users reported that they were in jail for property crimes. Of these, 68% fit into the conceptualization of economic-compulsive crimes, where the individual's rationale for the crime was to support his or her drug habit. In all, 28% of the crimes described by regular meth users were categorized as economic-compulsive. Together, these findings suggest a need for more research to investigate Goldstein's economic-compulsive model, especially for meth users. They

support our hypothesis that meth users are more likely to engage in certain property crimes to support their drug habit. Furthermore, these findings provide empirical support for the anecdotal claims regularly made by law enforcement officials in areas with high concentrations of meth use. In communities like Sacramento and Portland, where 35% and 15% respectively of arrestees tested positive for meth (ADAM II, 2008), the implications of these findings are most significant. In each of these sites and in the many communities like these scattered throughout the northwestern United States, these findings serve as a subtle warning. Of course these findings represent just one piece of the puzzle and without replication only represent the first step toward our understanding of the relationship between meth use and property crime.

This study provides no evidence supporting a link between meth and pharmacological or violent crime. The criminal history analysis found no statistically significant differences among groups for the number of violent crimes committed. For example, regular meth users had no more assault charges or overall charges for crimes against persons than the lifetime meth users and even non-meth drug users. This does not diminish the claims that meth users are likely to exhibit aggressive and paranoid behaviors (see Sommers & Baskin, 2006), but it does not provide any support for the argument that meth is likely to produce pharmacological violence. The criminal history of these offenders simply did not provide evidence supporting this claim.

Our findings warrant further investigations to identify the place of meth in the drug–crime nexus literature. Research is needed to investigate how and why meth use may influence criminal behavior. In particular, a more thorough examination of property crimes in areas with meth use would be valuable to determine how strong the link is between meth and property crimes. In Mesa County, Colorado, there is a common belief among law enforcement that meth is responsible for 80% of the property crime in the county. The claim, first made by a district court judge, is used frequently by law enforcement when talking about the meth problem (Mesa County Methamphetamine Task Force, 2006). This study provides support for the judge's claim that meth is linked to property crime, although it is probably not responsible for 80% of all property crime.

In conclusion, this research has provided an important first step in understanding the place of meth in the drug–crime nexus. Given the trajectory of meth use in recent years, it is important that drugs and crime scholars dedicate more resources to the study of meth use and its relationship to crime.

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