HIGHLIGHTS

Several indicators monitored by DEWS staff suggest that the use and availability of phencyclidine (PCP) are on the rise in Prince George’s County and adjacent areas. We conducted two studies to investigate perceptions about PCP use among juvenile offenders (n=16) and adult arrestees (n=20) in Prince George’s County, Maryland.

Key Issues: Why have the availability and use of PCP increased in Prince George’s County and the Washington Metropolitan area?

Key Findings:

- “Dippers” are now a popular way of using PCP. Dippers are perceived to be widely available in Prince George’s County and growing in popularity, especially among youth.
- Confusion exists about whether dippers contain liquid PCP, embalming fluid, and/or other ingredients.
- The effects of PCP are unpredictable and individual. It is unclear how frequently PCP causes violent behavior.
- Three recommendations for action are presented.

Treatment admissions. PCP-related treatment admissions reached a 5-year high among Prince George’s County residents in 2003. As shown in Table 1, between FY1999 and FY2003, PCP-related treatment admissions increased by 630% among residents of Prince George’s County, compared with a 262% increase for all of Maryland. Smaller increases were noted for counties bordering Prince George’s County, including Anne Arundel (300%), Montgomery (209%), and Charles Counties (141%). A substantial increase was also noted for Washington, D.C., residents admitted to Maryland treatment facilities (1178%).

OPUS interviews with juvenile offenders. Interviews with juvenile offenders by DEWS staff in Prince George’s County in 2003 reported perceived increases in the popularity of PCP. These juveniles talked about a popular new form of PCP called “dippers,” which are tobacco cigarettes and/or marijuana joints dipped in liquid PCP and then smoked.

Interviews with key informants. Treatment, law enforcement, and education professionals interviewed by DEWS staff in March and April of 2003 consistently reported an increase in use and availability of PCP in Prince George’s County, especially in the form of dippers.

Regional indicators. Prince George’s County is bordered to the west by Washington, D.C., and historically has shown similar drug trends to those in D.C. Prince George’s County has also served as a vending site for PCP originating in D.C. Multiple indicators in the Wash-

| Table 1. Increases in PCP-Related Treatment Admissions in Maryland, by Residence |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                 | FY99 | FY00 | FY01 | FY02 | FY03 | % Increase (FY99-03) |
| **By County/Jurisdiction of Residence** |       |     |    |     |     |                |
| Prince George’s County          | 53   | 87  | 202 | 302 | 387 | 630%           |
| Anne Arundel County             | 30   | 54  | 80  | 108 | 120 | 300%           |
| Montgomery County               | 33   | 40  | 55  | 63  | 102 | 209%           |
| Charles County                  | 29   | 17  | 20  | 47  | 70  | 141%           |
| Washington, D.C., residents     | 9    | 13  | 15  | 57  | 115 | 1178%          |
| admitted to Maryland facilities |     |     |     |     |     |                |
| **Statewide Maryland Admissions** | 281  | 362 | 529 | 758 | 1016 | 262%           |

Note: Maryland treatment admissions include some clients who reside in Washington, D.C. Regional data are shown only for Prince George’s County and its neighboring jurisdictions.

Source: Adapted from the Maryland Alcohol and Drug Abuse Administration (ADAA)
DEWS Investigates

February 2004

ingleton metropolitan area show recent increases in PCP use (Table 2). In addition, DEA seizures of large volumes of PCP and PCP precursor chemicals in 2002 in Baltimore and D.C. have suggested an increase in demand for PCP in the region.

**Media reports.** The number of media reports about PCP use in the Washington metropolitan area has increased recently. Between summer 2002 and winter 2003, a number of articles in *The Washington Post* and *The Washington Times* connected PCP use with several bizarre or violent incidents and depicted PCP as an increasing threat that contributed to the rising number of homicides in Washington, D.C., in 2002. One article stated that “30% of the homicides were gang- or drug-related...a drug called the dipper contributes to the problem.”

Another reported, “Smoking dippers gives...an unpredictable, often violent high...Some of last year’s most startling homicides have involved the use of PCP.” Concerns about the rapid increase in PCP availability were evident after a seizure in Baltimore of a large volume of liquid PCP, some of which was “headed this way,” according to D.C. Metropolitan Police Chief Charles Ramsey.

**Summary of Available Evidence**

DEWS’s monitoring of available data sources has suggested an increase in the use and availability of PCP in Prince George’s County, Maryland. Parallel trends observed in Washington, D.C., reinforce the importance of the trends observed in Prince George’s County, and media reports have raised additional questions. Yet the available indicators cannot explain the reasons behind the trends, and most are a year old by the time they are published.

**Unanswered Questions**

1. What accounts for the increase in the use and availability of PCP in Prince George’s County?
2. What do people believe dippers contain?
3. What are the effects of PCP use?
4. Does PCP cause violent behavior?

DEWS staff designed two studies to answer these questions. In-depth interviews were conducted with 16 juvenile offenders and 20 adult arrestees in Prince George’s County between August and November 2003. (See page 6 for a description of study methods.)

**Characteristics of Interviewees in These Two Studies**

Participant characteristics are presented in Table 3. The majority were African-American males. The juveniles ranged in age from 13 to 18, and the adults from 18 to 50. (Eighteen-year-olds may be processed in either system, depending on individual circumstances.) Drug crimes were the primary offense for nearly half of the adults but for none of the juveniles. In both studies, all eligible offenders who were approached for the study agreed to participate.

**Findings and Implications**

**Question 1: What accounts for the increase in the use and availability of PCP in Prince George’s County?**

The adult arrestees reported that PCP had increased in popularity, especially among youth and young adults. According to one adult:

“More [PCP] has been available in the past year and a half; it’s made a comeback. People know how to make it and there’s more of a demand for it. Kids in high school hear about it and they get curious.”

Adults also indicated that “dippers” were the specific form of PCP associated with the drug’s growing popularity. One adult reported:

“[Dipper is] a millennium-type drug; younger people are doing it (young is about 15, both boys and girls). It’s the hip thing now. Five years ago people were into marijuana, now it’s PCP.”

Other adults expressed similar opinions, stating that PCP is “the new fad drug out there” and “a trend for the new generation.” When questioned why dippers had become a new trend among young adults, one adult stated,

“[It is] different for the younger generation—they think [smoking dippers is] not as bad as doing crack.”

Most interviewed juveniles talked about dippers’ being very popular among youth. It was clear that most of these juveniles did not believe that dippers contain PCP. Out of 11 juveniles who had heard of dippers, the majority described a dipper as a tobacco cigarette or marijuana joint or blunt dipped in embalming fluid, not PCP. Making a clear distinction between PCP and dippers, most juveniles maintained that dippers are easy to obtain, whereas PCP is not widely available. One 17-year-old reported that:

Dippers are available “all the time” in the neighborhood, but PCP is “not available—people don’t do that.”

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**Table 2. Washington, D.C., Regional Indicators Also Show Increases in PCP Use**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Source</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCP-Related Anesthests</td>
<td>Washington Metropolitan Police Department</td>
<td>65% increase in the Washington metro area between 2001 and 2002 (from 142 to 234)</td>
</tr>
<tr>
<td>PCP-Related Emergency Department Visits</td>
<td>Drug Abuse Warning Network (DAWN)</td>
<td>148% increase in the Washington metro area between 2001 and 2002 (from 525 to 1302)</td>
</tr>
<tr>
<td>Reported PCP Exposures</td>
<td>National Poison Control Center Hotline</td>
<td>Increased from 4 in 2000 to 38 in 2002 in Washington, D.C.</td>
</tr>
<tr>
<td>PCP-Positive Adult Arrestees</td>
<td>District of Columbia Pretrial Services Agency</td>
<td>Increased from 2% in 1998 to 14.2% in 2002 in Washington, D.C.</td>
</tr>
</tbody>
</table>
Another 17-year-old reported that dippers have been available and used for the past 4 years, and that only a few people (in their 40s) talk about PCP. A 16-year-old stated that “dippers [are talked about] at school” but PCP is “not available.” The few juveniles who did talk about dippers containing PCP said that dippers could be made with either PCP or embalming fluid, but that they were two distinct substances used for different reasons and to produce different effects.

“Boat” was also reported as a less popular way of using PCP. Most adults and a few juveniles reported that boat consists of marijuana or parsley that has already been laced with PCP and is available in bags, which are referred to as “sacks of boat.” Boat can then be rolled into joints and smoked. Sacks of boat cost between $10 and $50; joints or blunts of boat cost $10 to $25. Although boat is still available, many adults indicated that boat was more popular in the past (e.g., “1988” or “10 years ago”). Speculating on why dippers have recently become more popular than boat, one adult explained,

“The young ones want the direct contact [of the dippers]. When you go to the strips, they dip your cigarette right there, as opposed to sacks that have been sitting around for a while.”

It is important to note that some of the juveniles who talked about boat believed it was the same thing as dippers and made with embalming fluid rather than PCP.

Implications. These findings support the idea that the use and availability of PCP—specifically in the form of dippers—have increased in recent years in Prince George’s County, especially among youth and young adults. However, we cannot determine what proportion of dippers, if any, are made with embalming fluid instead of PCP, a practice that was reported in Texas in the mid-1980s.5 Interviewed juveniles suggested that many young people do not think dippers contain PCP, and therefore may perceive dippers to be less harmful than other substances they could use. Furthermore, compared with other forms of PCP that were used in the past, today’s dippers may be fairly easy for users to conceal and carry. Besides being convenient, dippers do not look like an illicit substance, and smoking them requires no additional paraphernalia. A similar study of PCP users in Los Angeles in 2003 supported this conclusion.6

Question 2: What do people believe dippers contain?

A diverse range of opinions exists regarding the composition of the fluid used to make dippers. Most juveniles reported that dippers do not contain PCP. Rather, they said embalming fluid was the primary liquid ingredient used in dippers, and that it is cut with other ingredients, such as starter fluid or baby oil. One 17-year-old, however, who first heard about PCP in high school in 2000, reported that it consisted of “elephant tranquilizer, e-pills [ecstasy], and liquid crack.” Most adult arrestees, on the other hand, reported that PCP is the primary ingredient in the fluid used to make dippers. They identified similar secondary ingredients as those mentioned by juveniles, explaining that the PCP is laced with embalming fluid (or formaldehyde) and a variety of animal tranquilizers (including elephant and horse). One adult reported that the PCP sold today is mixed with crack, which causes people to get hooked on the drug. This adult stated, “You can stay high for a day off PCP. That’s not what they’re selling now, now it’s liquid crack... Young people don’t know it’s not the original drug.”

The majority of adult arrestees also reported that dealers have started dropping pills of ecstasy (most often referred to as “e-pills” among this population) into liquid vials of PCP. Some speculated that this may be a way of increasing the potency of the liquid sold as PCP or of reducing the level of numbness caused by PCP and thereby improving the feeling of the high. Others speculated that the addition of ecstasy to PCP could be a strategy used by dealers to maintain their clientele. One adult stated, “It was stronger then [in 1985]; it was elephant tranquilizer and phencyclidine. Now you have to add stuff to [phencyclidine] to make it as strong as it used to be—e-pills, heroin, cocaine (the liquid version), and cat tranquilizer.”

Implications. We found a lack of clarity regarding the composition of the PCP that is currently being used in Prince George’s County. The term “embalming fluid” is especially confusing because it can be used to describe both liquid PCP (as a slang term) and a PCP-free solution containing formaldehyde, methanol, ethanol, and other solvents.7 As a result, many individuals who use dippers do not know exactly what substances they are consuming, or as one adult aptly noted, “more so than [with] other drugs, a lot of people use [PCP] and don’t know what they’re using or doing to themselves.”

Youth appear to be especially vulnerable to this confusion, which perpetuates their misconception that dippers are not harmful. The confusing connection between PCP and embalming fluid was also reported in a similar study of PCP users in Washington, D.C.8

Table 3. Interviewee Characteristics

<table>
<thead>
<tr>
<th>Age</th>
<th>Total No. Interviews</th>
<th>Juvenile Offenders</th>
<th>Adult Arrestees</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 – 15</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>16 – 18</td>
<td>10</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>19 – 25</td>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>26 – 35</td>
<td>9</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>36 – 50</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary Offense (Self-Reported)</th>
<th>Juvenile Offenders</th>
<th>Adult Arrestees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Personal</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Drug-related</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

* Property offenses include arson, burglary, property destruction, theft/shoplifting, auto theft/unauthorized use of vehicle, stolen property, and forgery. Personal offenses include murder, assault, and armed or bank robbery. Drug-related offenses include drug possession and distribution. Miscellaneous offenses include violation of probation and resisting arrest.
To dispel some of this confusion, drug seizures suspected of containing PCP (including dippers, boat, and vials of liquid PCP or “embalming fluid”) should be tested to identify all the component ingredients. This information will be integral to an effective community response to the PCP problem, including prevention, treatment, and law enforcement efforts. Potential users need to be warned about the specific substances they may be exposed to in dippers. Furthermore, little is known about the differential health effects of the various ingredients that may be found in dippers, and different courses of treatment may be indicated for different combinations of ingredients.

The findings suggest a need for focused educational interventions warning youth that dippers contain PCP and are harmful. Educational materials and opportunities should also be made available to prevention and law enforcement personnel in order to ensure that the most current and accurate information is used to develop intervention and prevention strategies.

Question 3: What are the effects of PCP use?

According to the interviewed juveniles, the effects of PCP and dippers are dependent on the frequency of use, potency of the drug, and amount consumed. Effects produced by PCP or dippers include:

“feeling hot and dizzy,”
“seeing stuff...hallucinating,”
“[making] you feel powerful, and you can do anything,”
“[looking] dead and [moving] in slow motion,”
“[becoming] horny and...ready to have sex,”
getting an “adrenaline rush...[that]makes you drive real fast...makes you act goofy, and then you can’t move, [and the user is] stuck in their own world,”
“[having] delayed reactions.”

Furthermore, a 15-year-old reported that the “big difference” between the effects of PCP and embalming fluid “would be you won’t be in the right state of mind with PCP, you would feel paranoid. With embalming fluid they feel stuck, they feel numb.” PCP users in Washington, D.C., in a separate study, reported similar effects.9

Generally, the adults’ reports of physical and psychological effects supported those of the juveniles. Some adult arrestees reported that PCP intensifies the user’s feelings or thoughts (either positive or negative) and slows down the “real world” and the user’s reaction time. Additional effects were forgetfulness, blackouts, hallucinations, quick mood changes, and an increased sense of euphoria or feelings of “superhuman” strength and power. Adults did not comment specifically on the effects of embalming fluid, possibly because they did not distinguish between PCP and embalming fluid the way juveniles did.

Question 4: Does PCP cause violent behavior?

A question on violence was added to the interview protocol after the juvenile interviews were completed. Although they were not asked directly about dippers and violence, relevant comments were volunteered by two juveniles who were knowledgeable about PCP and dippers. One talked about three acquaintances who died while high on PCP: one friend committed suicide, another jumped to his death, and a third died in a car crash.

The other juvenile explained that some people use dippers if they “know they’re going to kill someone...[They] get energy to shoot some boy and [can’t] remember the next day.”

Adult arrestees were asked whether they agreed with the media portrayals of violent behaviors caused by PCP use. Although the majority believed that there was some connection between PCP and violence, fewer than half said that PCP actually causes violence. Instead, many respondents insisted that the effect of PCP depends on the underlying personality or mood of the user, and that violence only occurs with users who are already predisposed to violence, because it “takes effect on emotions that you’re not really supposed to act on...it’s a booster of feelings.” Some people with violent intentions may even use PCP “to get the heart, character, and courage to be violent” or “as an excuse to set a car on fire.” In other words:

“[It] depends on the person, [PCP] intensifies people who are already aggressive.”

“It’s the person, not the drug. If the person’s in a mood, the drug makes them feel indestructible...the majority of the time [someone who commits a violent crime] is going to be a violent person.”

<table>
<thead>
<tr>
<th>What is a Dipper?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adult arrestees said:</strong></td>
</tr>
<tr>
<td>To make a dipper “you take a cigarette and dip it inside a bottle [of PCP] and suck up the fluid.”</td>
</tr>
<tr>
<td>Dippers cost between $15 and $30.</td>
</tr>
<tr>
<td>Vials of liquid PCP (“water”) start at $50 (enough for 2 cigarettes). Larger vials for $200 are enough for 4 to 10 cigarettes (depending on how far the cigarette is dipped).</td>
</tr>
<tr>
<td>Liquid PCP is sold in small brown bottles (like those used for vanilla extract).</td>
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</tbody>
</table>
“Just like with alcohol, if you have a violent streak in your body, you will probably be violent once you get drunk.”

The perception exists that media accounts exaggerate violence among PCP users, because the “media is designed to jack people up and report on what they want you jacked up about...they sensationalize things,” but “they’re not even out there, they don’t even know.”

When asked about negative experiences with PCP, interviewed adults described a range of effects that sometimes lead to violence. Memory loss and blackouts can lead to accidents and injuries (“you black out while driving, you’re not functioning properly”). Also, as with other drugs, the need for money to buy PCP leads to some criminal behavior, because “if people don’t have money, they rob and steal to get the money [for the drug they want].” In addition, many adults reported that violence may occur as a result of PCP users being unaware of their actions. For example, “[You] don’t know what you’re doing because you’re so high. If someone says something to you, you go off on them.” Moreover, the range of responses suggests that the effects of PCP are highly personalized and unpredictable.

“[It] depends on the person—whether or not they can handle the drug. Some can control [it] and some cannot.”

When asked to estimate how many PCP users experience violence and other negative experiences, most responses ranged between 10 and 50 percent, but a few estimated that as many as 70 to 90 percent of PCP users will become violent.

“Fifty percent of 100 will have a negative experience. When the high comes down, you don’t know what you did, so 100 percent will use again.”

Implications. Many of the perceptions reported in these interviews disagreed with the way that PCP is portrayed in the media as a frequent cause of violent behavior. They revealed a level of cynicism toward exaggerated accounts of PCP-induced violence. Similar concerns about the accuracy of news reports on PCP use have been raised in the past in other studies that cited a lack of scientific evidence that PCP causes violent behavior. One study found that PCP use was associated with “goal-oriented, income-generating crimes” rather than the violent and bizarre crimes characterized in the media. An expert in emergency medicine recently estimated that only five to ten percent of PCP users have violent reactions. Today there is still “no scientific basis that PCP specifically causes violent or criminal behavior,” yet that assumption continues to be perpetuated in recent media reports. It is possible that the range of opinions reported in these interviews reflects the confusion and disagreement that has resulted from discrepancies between users’ experiences with PCP and media reports about the effects of PCP.

Limitations of These Two Studies

These studies were designed to collect detailed, qualitative, current information about PCP use in Prince George’s County. Consequently, our small sample of interviewees is not representative of the entire population of juvenile offenders or adult arrestees in Prince George’s County. Also, because interviewees were not asked to report on first-hand use of PCP, the information obtained may have been limited. Finally, the juvenile offenders interviewed here were less knowledgeable about PCP than the adult arrestees, possibly because of their misconceptions about dippers; therefore, their reports about PCP use may be less reliable than those from the adults.

Questions for Future Research

1. Do people in other counties and in the general population (i.e., non-arrested) have similar perceptions about PCP?

2. What ingredients are used to make dippers, and what proportion of dippers are made with PCP vs. embalming fluid?

3. What is the relationship between PCP use and other drug use?

Summary of Recommended Actions

Based on the findings presented in this report, DEWS staff recommend the following actions for consideration.

1. Laboratory testing should be undertaken on suspected PCP drug seizures from Prince George’s County. Testing should be done on seizures of dippers, liquid PCP, “embalming fluid,” and boat, to determine all the component ingredients. This information will play a key role in informing the public about PCP and shed light on the widespread confusion regarding the composition of dippers.

2. An educational campaign should be undertaken to increase public awareness. Specific activities could include public service announcements, radio spots, slides in movie theaters, and enhancements to school-based curricula. These efforts should provide accurate information about the health risks of PCP, embalming fluid, and dippers, as well as their unpredictable effects on behavior. Specialized education and training for law enforcement personnel and educators regarding the use of dippers, emphasizing their ease of use and concealability, may also be indicated, to heighten the ability to identify potential users and/or dealers.

3. Continued close monitoring of PCP use in this region is warranted. The sustained popularity of dippers in Prince George’s County and throughout the Washington metropolitan area has been widely documented by DEWS staff. The most recent urinalysis data available from the District of Columbia Pretrial Screening Service suggest that PCP-positive rates among arrestees may be leveling off (having decreased slightly from 14.2% in 2002 to 13.8% in 2003). Nevertheless, there are no indications that PCP’s popularity will recede, especially considering the convenience of dippers. Therefore, DEWS will continue monitoring changes in PCP use in both Prince George’s County and other counties where PCP use has recently increased (see Table 1).
The Drug Early Warning System (DEWS) rapidly detects emerging drug trends in Maryland. DEWS staff monitor several indicators of drug use across the state and conduct periodic interviews with juvenile offenders in the Juvenile Offender Population Urine Screening (OPUS) program, and with professionals in prevention, law enforcement, treatment, and other disciplines. Collaborating Maryland agencies include:

- Department of Education
- Department of Juvenile Services
- Alcohol and Drug Abuse Administration
- Office of the Chief Medical Examiner
- State Police
- Department of Public Safety and Correctional Services
- State Highway Administration Office of Traffic and Safety

This multidisciplinary approach gives DEWS staff a deeper understanding of substance abuse indicator data and provides Maryland officials with the most timely information available.

Study Methods

The two studies were designed to provide qualitative information about PCP use rapidly and on a limited budget. Interviews were the preferred method of data collection because they offer both efficiency and flexibility. DEWS staff selected Prince George's County as the interview site because it has shown the largest increase in PCP use in Maryland, and because of its proximity to Washington, D.C., where PCP use has been a serious problem in the past. (In 1987, 43% of adult arrestees in D.C. Pretrial Services tested positive for PCP.) Approval for both studies was obtained from the University of Maryland Institutional Review Board (IRB) prior to commencing the interviews.

Juvenile Offenders. Sixteen juvenile offenders were interviewed anonymously at the Department of Juvenile Services in Prince George's County during August and September of 2003. Juveniles referred for intake processing by the juvenile justice system were approached to participate in the study. Consent was obtained from both the juvenile and his/her parent/guardian prior to administering the private, 15-minute, semi-structured interview. The interviewer first determined whether the juvenile had some knowledge about PCP or dippers, and then proceeded with more detailed follow-up questions (e.g., how PCP is used, who uses it, the motivations for using it, its availability, and how these aspects may have changed over time). Juveniles were asked about the use of PCP by others in their schools, neighborhoods, and communities. They were not asked about their own drug use. A candy bar was offered as an incentive for participation.

Adult Arrestees. Twenty adult arrestees at the Prince George's County Department of Corrections (DOC) were interviewed anonymously in November of 2003. Adult arrestees were screened for likelihood of knowledge about PCP, using information in the DOC assessment. Arrestees with considerable knowledge were approached to participate in the study, and informed consent was obtained prior to the interview. Interviews lasted 30 minutes and were similar in content to the juvenile interviews (i.e., respondents were not asked about their own drug use), with the addition of a question about perceptions of PCP use and violent behavior.

7 Elwood, 1998.
9 Ibid.
12 Ibid.
13 Phil Brewer, assistant professor of emergency medicine at Yale University. (Quoted June 2, 2003). Teen: PCP caused me to rob and hurt people. The New Jersey Journal.