

# POLICING MENTALLY DISORDERED SUSPECTS: A REEXAMINATION OF THE CRIMINALIZATION HYPOTHESIS\*

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*The criminalization hypothesis is based on the assumption that police inappropriately use arrest to resolve encounters with mentally disordered suspects. The current study uses data collected from two large-scale, multi-site field studies of police behavior—the Project on Policing Neighborhoods (POPEN) conducted in 1996–1997 and the Police Services Study (PSS) conducted in 1977—to examine the relationship between suspect mental health and use of arrest by police. Multivariate results show that police are not more likely to arrest mentally disordered suspects. Implications for future research on the criminalization hypothesis are discussed.*

Contact with mentally disordered citizens has long been a part of police work (Bittner, 1967a; Monkkonen, 1981). Prior to the 1960s, however, such contact was limited because persons with mental disorders were likely to be treated in “total institutions” that removed them from communities (Goffman, 1961). More recently, a number of large-scale policy changes have converged to increase contact between police and mentally disordered citizens. These include deinstitutionalization (i.e., the downsizing or closing of state and county psychiatric hospitals), more stringent civil commitment criteria, and underfunded community-based treatment programs (Skull, 1977; Teplin, 1983; Wachholz and Mullaly, 1993). As a result of these policy shifts, two important changes have occurred. First, individuals with mental disorders now reside in communities where psychiatric care is provided—when available—by acute care community-based mental health facilities (Silver, 2000). Second, the degree to which

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police are called on to handle situations involving mentally disordered citizens has increased substantially (Bonovitz and Bonovitz, 1981; Menzies, 1987; Teplin and Pruett, 1992).

Simultaneously, changes in policing policies (e.g., aggressive order maintenance and community-oriented and problem-oriented policing) have led to increases in police handling of minor disorders and incivilities (Goldstein, 1990; Skolnick and Bayley, 1986; Wilson and Kelling, 1982). Many of these minor disorders and incivilities include calls to handle the bizarre or disturbing behavior of mentally disordered citizens that others in the community find unacceptable. A recent survey of a large metropolitan police department found that 89% of officers had contact with mentally disordered citizens in the previous year (LaGrange, 2000).

As noted by Teplin and Pruett (1992), two legal principles govern police involvement with mentally disordered citizens: (1) police power, the duty to protect the public by removing dangerous people from the community; and (2) *parens patrie*, the duty to help citizens who are unable to help themselves. The responsibility to protect the public requires that police arrest suspects who commit felony offenses, regardless of the suspect's mental condition. In contrast, *parens patrie* stipulates that police provide assistance to citizens who are in need. Because the responsibility to protect the public is primary, *parens patrie* concerns are far more likely to surface in situations in which a mentally disordered suspect is involved in a less serious (i.e., misdemeanor) offense. According to Durham et al. (1984:581),

The manner in which the police resolve a disturbance caused by a mentally ill individual rests heavily on the exigencies of the situation, such as the person's behavior or degree of threat to self or others, and the resources available to the officer, such as responsible family members and accessible jails, mental health facilities, or detox centers.

Similarly, qualitative police research suggests that police officers perform a dual role as "law" officers and "peace" officers (Banton, 1964; Bittner, 1967b), the latter of which encompasses the handling of mentally disordered citizens. While legal statutes and administrative policies typically guide officer decision making in "law enforcement" situations, officer discretion is greater and more difficult to control in "order maintenance" situations (Wilson, 1968). In order maintenance situations, the role of the officer is to "handle the situation"—often through informal means. Bittner's (1967a) work confirms that officers typically rely on informal dispositions to resolve order maintenance situations involving mentally disordered persons, and that officers supplement or supplant legal requirements with their reading of the need for intervention (see also Mastrofski et al., 2000). In short, the "quantity of law" (Black, 1976) that is applied in

encounters with mentally disordered suspects depends, to a great extent, on extralegal factors that vary across places and situations, and largely depends on police discretion.

The term criminalization was coined by Abramson (1972) to characterize what he saw as a disproportionate number of mentally disordered misdemeanants entering the criminal justice system via arrest. Subsequent uses of the term in the literature, however, vary greatly with some researchers defining criminalization in terms of arrest, others requiring prosecution, and still others requiring incarceration in jail or prison (for review, see Steury, 1991). These differences reflect the fact that criminalization may occur at several decision points in the system (Steadman et al., 1984). Definitions also vary based on the seriousness of the offense. For example, some scholars define criminalization as invoking the criminal justice system to handle any type of offense committed by mentally disordered persons, whereas others limit the definition to include only situations that involve a minor offense (Lamb and Weinberger, 1998). Common to all of these definitions is the belief that "many uncared for mentally ill persons may be arrested for minor acts that are, in fact, manifestations of their illness, their lack of treatment, and the lack of structure in their lives" (Lamb and Weinberger, 1998:485). As such, the term criminalization typically has a negative connotation, suggesting some form of unfair punishment.

However, punishment need not be the primary justification for arresting mentally disordered citizens. Indeed, law enforcement officers may be more inclined to take mentally disordered persons to jail if they believe no appropriate alternatives are available, a practice that has been referred to as "mercy booking" (Lamb and Weinberger, 1998:488). Furthermore, several scholars have noted the difficulty that officers often encounter when trying to invoke the mental health system rather than the criminal justice system (Matthews, 1970; Teplin, 1984; Whitmer, 1980). Officers often find that mental health service providers will not treat suspects who appear dangerous. In such circumstances, arrest often is the only humane alternative (Monahan et al., 1979; Whitmer, 1980).

### EVIDENCE BEARING ON THE CRIMINALIZATION HYPOTHESIS

The criminalization hypothesis is based primarily on three areas of research: (1) statistical descriptions of the proportion of mentally disordered persons in prisons and jails; (2) follow-up studies of the arrest rates of former mental patients; and (3) field research comparing the arrest rates of mentally disordered and non-mentally disordered suspects.

Numerous studies have found that persons with mental disorders are over-represented in prisons and jails, with prevalence estimates ranging from 1.8% to 22.0%, depending on how mental disorder is defined and which demographic groups are studied (Bureau of Justice Statistics, 1999; Lamb and Grant, 1982; Lamb and Weinberger, 1998; Palermo et al., 1991; Steury, 1991; Teplin, 1990; Wachholz and Mullaly, 1993; Whitmer, 1980). Further, Palermo et al. (1991:103) reported statistically significant overlap between mental hospital and jail populations over a 15-year period, leading them to conclude that "there may be a two-way flow of people from prison to the mental health system and back again, which indicates that many of the jail/prison inmates may be inappropriately sentenced or held because they have incapacitating mental illnesses" (but see Steadman et al., 1984).

A second source of evidence for the criminalization hypothesis comes from follow-up studies of arrest rates among former patients. In her review of arrest-rate studies, Rabkin (1979) observed that whereas investigations conducted prior to 1965 did not find higher rates of arrests for former patients, studies conducted after 1965 did. In addition, as noted by Link et al. (1992), arrest-rate studies conducted after Rabkin's review consistently find an increased risk of arrest associated with patient status.

Although suggestive, the disproportionate number of mentally disordered inmates in prisons and jails does not imply necessarily that police inappropriately use arrest to handle mentally disordered cases; nor do higher rates of arrest among former patient samples lead directly to this conclusion. Before such a conclusion can be reached, it is necessary to consider the formal and informal linkages that exist between the criminal justice and mental health systems. Specifically, if the opportunity for interagency service delivery is not available, then "criminalization" cannot be attributed solely to inappropriate police behavior. According to Lamb and Weinberger, "if social control through the mental health system is impeded because of constraints such as fewer long-term state hospital beds, community pressure will result in placement of some of these persons in the criminal justice system" (1998:485). In short, police discretionary behavior vis-à-vis the mentally ill is constrained first and foremost by the availability and receptivity of local mental health service agencies.

A third—and more direct—source of support for the criminalization hypothesis comes largely from a series of studies, the most prominent of which was published by Linda Teplin in 1984 comparing the rates of arrest for mentally disordered and non-mentally disordered suspects. Using systematic observational data of patrol officers' encounters with 506 suspects in Chicago (30 of whom were judged by observers to be mentally disordered), Teplin found that the rate of arrest for mentally disordered suspects was 46.7% compared with 27.9% for non-mentally disordered



suspects. After disaggregating arrest rates by the seriousness of the incident, Teplin concluded, "within similar types of situations, persons exhibiting signs of mental disorder have a higher probability of being arrested than those who do not show such signs. Clearly the way we treat our mentally ill is criminal" (1984:798). This conclusion is widely cited by both researchers and policy makers. It has been used to explain the overrepresentation of mentally disordered persons in U.S. prisons and jails (Lamb and Weinberger, 1998) and to justify the development of mental health-law enforcement partnerships aimed at assisting police during mental health calls (Borum et al., 1998; Steadman et al., 2000).

An important limitation of Teplin's core finding, however, is that it is based on cross-tabulation analyses without statistical controls for legal factors and other variables known to influence police discretion (Riksheim and Chermak, 1993). Thus, the degree to which the decision to arrest citizens with mental disorders is explained by legal and extralegal characteristics related to the encounter is not known. In addition, to our knowledge no attempts have been made to replicate Teplin's core observation.<sup>1</sup> Furthermore, evidence challenging the criminalization hypothesis appears in the literature. For example, Bonovitz and Bonovitz's study of arrests among mentally disordered suspects involved in nondangerous incidents did "not support the hypothesis that the noncommitable mentally ill are being arrested and jailed as an expedient means of removing them from the community" (1981:976). Similarly, Bittner's (1967a:279) work in this area found that police generally were reluctant to take any official action (including arrest) "on the basis of the assumption or allegation of mental illness" and that officers often chose to resolve such encounters informally.

In short, the robustness of Teplin's (1984) finding that police disproportionately use arrest to resolve encounters with mentally disordered suspects remains an open question. The purpose of the current study is to examine this question using data from two large-scale, multisite field studies of police behavior—the Project on Policing Neighborhoods (POPEN) conducted in 1996–1997 (Parks et al., 1999) and the Police Services Study (PSS) conducted in 1977 (Whitaker, 1982). The size and richness of the

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1. The one study that attempted to do so—using Teplin's own data—could not (Kalinich and Senese, 1987). The reason for this failure to replicate is that Kalinich and Senese (1987) inappropriately studied the likelihood of arrest among citizens, not suspects. Specifically, they selected from Teplin's data 1,629 citizens "identified as being involved in situations or exhibiting behaviors that would require intervention by the police officers," which included traffic and service police-citizens encounters that had been eliminated appropriately by Teplin. In contrast, Teplin's work was based on 506 suspects (i.e., individuals for whom arrest was a realistic possibility). Therefore, it is not surprising that Kalinich and Senese were unable to replicate Teplin's results.

POPAN and PSS data sets offer a unique opportunity to reexamine the criminalization hypothesis at two different periods in time and with appropriate statistical controls. We follow Teplin (1984) in defining criminalization in terms of the decision by police to arrest mentally disordered suspects involved in both serious and minor offenses. We focus on the decision to arrest because arrest is the primary point of entry into the criminal justice system; we focus on situations varying in seriousness to enable direct comparisons with earlier work.

## DATA SOURCES

### THE PROJECT ON POLICING NEIGHBORHOODS (POPAN)— 1996–1997

POPAN data were gathered using systematic observations of patrol officers and field supervisors (i.e., sergeants and lieutenants) during the summer of 1996 in the Indianapolis, Indiana, Police Department (IPD) and during the summer of 1997 in the St. Petersburg, Florida, Police Department (SPPD). Trained observers accompanied officers during their entire work shifts and unobtrusively recorded brief field notes describing police-citizen encounters and other activities in which officers engaged.<sup>2</sup> Based on these field notes, observers prepared narrative accounts of the events they observed and coded data items about the police-citizen encounters and other activities of officers (see Parks et al., 1999).<sup>3</sup>

Over 5,700 hours of field observations were conducted in 24 neighborhoods across the two sites. The selection of neighborhoods was biased intentionally toward patrol areas that were expected to yield higher than average levels of police activity. These areas were marked by higher levels of social and economic distress than was the city overall (Parks et al., 1999:492). In addition, busier days and times (i.e., evening shifts and shifts on Thursdays through Sundays) were oversampled to increase the number of observed encounters with the public (Parks et al., 1999:493). In IPD,

2. Field observers were graduate students and honors undergraduates who were trained in systematic observation of police over the course of a semester, and who conducted on-site orientation rides (Mastrofski et al., 2000:320). Observers were "instructed to minimize their involvement in police work . . . and to refrain from expressing views about police work in general or what they observed on the ride" (Parks et al., 1999:495).

3. Observational data have been criticized for susceptibility to reactivity bias. That is, observed officers may alter their normal patterns of behavior to more closely conform to what is socially desirable. Although few efforts have been made to assess the degree of reactivity bias in observational data, most studies suggest that the validity of observational data is, in general, high (see Mastrofski and Parks, 1990). In addition, the effects of situational variables on officer behavior, including the use of force, do not appear to be influenced by reactivity bias (Reiss, 1968a, 1968b, 1971; Worden, 1989).

194 patrol officers were observed during 336 shifts; in SPPD, 128 officers were observed during 360 shifts (Mastrofski et al., 2000; Parks et al., 1999).

Data for the analyses reported here include all nontraffic suspects not wanted by police for prior criminal activity who were involved in "significant" encounters with patrol officers ( $N = 1,849$ ). Twelve suspects with missing data on one or more variables were excluded from the analyses. A "significant" nontraffic encounter consisted of one of the following: (1) any communication between officer and citizen that lasted more than one minute; (2) use of physical force by officer or citizen; or (3) three or more verbal exchanges between officer and citizen (Mastrofski et al., 1998). Encounters described as "significant" ranged in length from a minute to several hours. Brief encounters (i.e., those that involved less than three verbal exchanges or lasted less than one minute in duration) and casual encounters (i.e., encounters that did not involve police business or a problem presented to police) were excluded from these analyses. Citizens were coded as suspects if they were identified by an observer as peace disturbers, wrongdoers, or the targets of a third-party complaint (Mastrofski et al., 1998).

In order to examine the criminalization hypothesis within the context of less serious offenses, we conducted a second set of analyses on a subset of these suspects: 1,578 suspects involved in misdemeanor offenses (85.3% of the original sample). For each encounter, the observer recorded up to two codes selected from a list of 264 problem codes to characterize the nature of the problem at each of three times: as it was initially presented to police (usually by a dispatcher), upon the officer's arrival at the scene, and at the end of the encounter. The classification of problems as misdemeanor offenses was based on observers' characterization of problems at the conclusion of the encounter, which represents the most complete and accurate information available. Misdemeanor offenses included public disorders, victimless crimes, and minor-to-moderate property crimes.

### POP SITE DESCRIPTIONS

The IPD serves the city of Indianapolis, with an estimated population of 377,723 in 1995. At that time, the city consisted of 39% minorities, 8% unemployed, 9% below the poverty line, and 17% female-headed households with children. The UCR Index crime rate in 1996 was 100 per 1,000 residents. During that year, the department employed 1,013 sworn officers, 17% of whom were female, 21% of whom were minorities, and 36% of whom had a four-year college degree. The patrol division was divided geographically into four districts, all of which were studied (for details, see Mastrofski et al., 2000; Parks et al., 1999).

According to a sergeant in the investigations division with whom we

spoke by phone, no official IPD policy was in place for handling persons with mental disorders who broke the law during the time of POPN data collection. In general, when the law was violated, officers were directed to take the mentally disordered person into custody (i.e., make an arrest). The person was then transported to a hospital with a secured, lock-up facility and an around-the-clock mental health team. After treatment, the person would face whatever charge was assigned when he or she was taken into custody. In cases of minor disturbances, the charge usually was "trespass." Officers also were allowed to take custody of a person with a mental disorder if they believed he or she posed a clear danger to himself or herself or to others. In such cases, officers invoked "immediate emergency detention" using the same procedures described above, except that no arrest was made. Therefore, the informal IPD policy for handling a mentally disordered person was to make an arrest if a law was broken, and to use immediate emergency detention if the person was believed to be in need of help but did not break the law. In either scenario, the individual initially was taken to the hospital. Although numerous hospitals and intake facilities operated in Indianapolis, the police generally used the county hospital, where a long-standing cooperative relationship was in place.

St. Petersburg, Florida (population of 240,318 in 1995) is located at the southern tip of Pinellas County. In 1995, the city consisted of 24% minorities, 5% unemployed, 6% below the poverty line, and 10% female-headed households with children (Parks et al., 1999). The UCR Index crime rate (per 1,000 residents) was 99 in 1996. During that year, the SPPD had 505 sworn officers, 13% of whom were women, 22% of whom were minorities, and 26% of whom had a four-year college degree (for details, see Mastroski et al., 2000; Parks et al., 1999).

Although currently in place, innovative policies and practices for policing persons with mental disorder were not implemented by SPPD until after POPN data collection was completed. Prior to 1998, SPPD officers received a minimum amount of training in the handling of persons with mental disorder, primarily as part of the required police academy curriculum. At the time of observation, state law under the Baker Act required that police take into custody mentally disordered persons who posed a danger to themselves or to others for the purpose of treatment. Such individuals were brought to one of three hospitals, depending on their age and military status. In addition to emergency treatment facilities, a number of Assisted Living Facilities operated in the city to provide community-based mental health treatment. If a person with a mental disorder broke the law, officers were instructed to make an arrest. The suspect was then taken into custody and transported to a jail facility, where he or she would receive mental health services. According to an SPPD administrator that



we spoke to by phone, officers viewed the psychiatric emergency intake facilities as reluctant to admit mentally disordered citizens because intake staff frequently did not believe that the dangerousness standard stipulated by the Baker Act applied.

#### POLICE SERVICES STUDY (PSS)—1977

The PSS data were gathered in 1977 in 24 police departments in three metropolitan areas (Rochester, New York; St. Louis, Missouri; and Tampa/St. Petersburg, Florida). These departments ranged in size from 13 sworn officers to over 2,000 and served municipalities with populations that ranged from 6,000 to 499,000. Although not a random sample, the PSS represented a rough cross section of police organizations and service conditions in urban areas in the United States. Similar to POPN, the PSS data were gathered via systematic observations of patrol officers in 60 neighborhoods with an oversample of busy shifts to observe higher levels of police activity (for details, see Caldwell, 1978; Parks et al., 1999; Reiss, 1971). Trained observers accompanied officers on 15 shifts in beats matched on neighborhood characteristics, and recorded information about police-citizen encounters, including the characteristics and actions of both citizens and officers.

Data on 5,688 police-citizen encounters were coded during more than 900 shifts using a standardized instrument (Caldwell, 1978). We selected a subset of PSS cases: 1,392 nontraffic suspects not wanted by police for a previous offense and who were engaged in a significant encounter with patrol officers. Twenty-six suspects with missing data on one or more variables were excluded from the analyses. The criteria for a "significant" encounter are similar to those used for POPN data (i.e., three or more verbal exchanges, communication lasting more than one minute, or use of force by citizen or police). Citizens were coded as suspects if at the end of the encounter with police, they were considered "suspect in a criminal matter or a peace disturber," or the "person was complained about in a civil matter." Thus, both the PSS and POPN data examined here consist of citizens identified as suspects in significant, nontraffic encounters with police. These data are directly comparable to those studied by Teplin (1984).

As with the POPN data, a second set of analyses examines a subset of these suspects: 1,289 suspects involved in only misdemeanor offenses (92.6% of the original sample). For each encounter, the observer recorded at least one and up to three codes selected from a list of 247 problem codes to characterize the nature of the problem at each of three times: as it was initially presented to police (usually by a dispatcher), upon the officer's arrival at the scene, and at the end of the encounter. Again, the

classification of a problem as a misdemeanor offense was based on observers' characterization of problems at the end of the encounter.

Unfortunately, we know very little about the formal policies guiding police decision making toward mentally disordered persons in these 24 departments in the late 1970s. However, police research from this time period suggests that officers had a wide range of discretion and that few formal policies were in place to guide their decisions (Bittner, 1970; Whitaker, 1982; Wilson, 1968). Similarly, research during this time on the impact of deinstitutionalization on the criminal justice system also suggests that few formal policies existed to guide police discretion (Steadman and Morrissey, 1987).

## MEASURES

### ARREST

Similar to Teplin (1984), our study focuses on the decision to arrest. In both the POPN and PSS studies, arrest is defined as taking a citizen into custody for the purpose of charging the citizen with a criminal offense and could occur either at the scene of the encounter or at the police station. Of the 1,847 POPN nontraffic suspects, 17.8% were arrested. Of the 1,392 PSS nontraffic suspects, 13.1% were arrested.

### MENTAL DISORDER

Mental disorder was recorded initially in both the POPN and PSS studies based on field observers' perceptions. POPN observers were instructed to code suspects as mentally disordered if they appeared unable to "perceive situations as a reasonable person would or to control their emotions and actions." In addition, there needed to be "some indication that it is a chronic (continuing) condition, not one arising from the immediate circumstances (e.g., anger or frustration arising from a personal conflict)." Similarly, PSS observers were instructed to code whether the citizen "exhibited any evidence of mental disorder." These measures tap into what may be considered "typical" beliefs about mental disorder. Such beliefs are conditioned by cultural norms in American society and therefore are likely to be held by field observers and officers alike. As Bittner (1967a:280) notes, "the views and knowledge of the police about mental illness are in close agreement with the views and knowledge of the public in general." Similarly, Mastrofski et al. (2000:326) argue that police "must nearly always rely on limited information to make judgments about need, using readily observable characteristics to classify people." Thus, although lacking in diagnostic precision, these measures of mental disorder are believed to reflect the type of on-the-spot assessment that officers typically must make.

The correspondence between observers' and officers' perceptions of mental disorder was directly examined with the POPN data, where in addition to coding suspects as mentally disordered (as described above), observers also wrote a detailed narrative of each police-citizen encounter. These narratives incorporated additional information obtained from "debriefing" the officers immediately after they concluded encounters with citizens, including officers' assessments of the suspect's mental condition (Mastrofski and Parks, 1990). We used the POPN narratives to check the validity of the coded measure of mental disorder described above. For the few cases ( $N = 9$ ) in which field observers' coding of mental disorder could not be validated in the narrative account, a coding of not mentally disordered was used. These cases included two suspects who were mentally retarded but had been incorrectly coded as mentally disordered and seven suspects who had been coded as mentally disordered but showed no evidence of disorder based on the POPN narratives. In all seven cases, the suspect appeared to be a chronic alcoholic with strong behavioral indications of intoxication, but did not exhibit behavioral symptoms indicative of mental disorder. Nonetheless, whether we coded these cases as mentally disordered or not, our results did not change.

In addition, we examined the narratives for positive indications of officers' perceptions of the suspect's mental status. For 87.2% of the mentally disordered suspects (68 out of 78), the officers clearly indicated that the suspect was mentally disordered. Officers described the citizens in these encounters as "mental," "just nuts," "crazy," "completely loony," or behaving as the result of "a full moon." In two cases in which observers had coded a citizen as mentally disordered, however, officers indicated during the debriefing that they did not believe the suspect was mentally disordered. For example, when asked why he did not take a citizen acting in an erratic, aggressive, and at times incoherent manner to a psychiatric facility, one officer reported informally that "the citizen wasn't crazy, he was just an asshole" (narrative from the Project on Policing Neighborhoods). We coded these two cases as non-mentally disordered. Finally, for eight of the encounters with mentally disordered suspects (10.3%), the narrative did not provide any information regarding the officers' perception of the suspects' mental status. Thus, to ensure that our measure of mental disorder reflects officers' perceptions only, these suspects were recoded as non-mentally disordered. Here again, we obtained similar results to those reported below when we include these eight suspects in the analyses as mentally disordered. Using these procedures, 3.6% of POPN nontraffic suspects (66 suspects) were perceived by police as mentally disordered.

Unfortunately, we were unable to ascertain officers' perceptions of mental disorder in the PSS data because observers did not consistently

write detailed narratives, nor were officers debriefed. We have no reason to believe, however, that the correspondence between officers' and observers' perceptions in the PSS data would be different from that found in the POPN data. Using observers' perceptions, 2.7% of nontraffic suspects in the PSS data (37 suspects) were coded as mentally disordered.

Note that the percentages of mentally disordered suspects encountered by police in both the POPN and PSS studies (3.6 and 2.7, respectively) are lower than the 5.9% reported by Teplin (1984). This difference most likely is due to differences between the studies in the coding of mental disorder. Specifically, Teplin had clinically trained fieldworkers use a standardized Diagnostic and Statistical Manual (DSM)-based checklist to measure mental disorder, a procedure that led her to count as mentally disordered many citizens whom police did not view as such. As Teplin (1984) explains, "in all cases, the discrepancy between officer and fieldworker was one of underidentification by the officer; that is, the officer failed to identify a person as mentally disordered who was so labeled by the fieldworker. Of the 30 suspects defined as being mentally disordered by the fieldworker, only 15 (one-half) were detected by the officer" (Teplin, 1984:799). This is an important point because a key mediating variable in the criminalization hypothesis is officers' perceptions of mental disorder, regardless of whether mental disorder is present in a clinical sense. If the goal is to understand officers' decision making, then officers' perceptions of mental disorder are more relevant than are classifications based on clinical criteria. Therefore, an advantage of the current study is that mental disorder was measured using officers' perceptions, and in the case of PSS, field observers' perceptions—both of which were found to be highly consistent based on the POPN data.

#### SITUATIONAL, SUSPECT, AND LEGAL VARIABLES

We know of no prior studies of the relationship between mental disorder and arrest that have taken into account control variables known to affect police decision making. Yet, recent research suggests that persons with mental disorders are more likely than others to engage in dangerous or violent behavior (Link et al., 1992; Swanson et al., 1990), particularly when under the influence of drugs or alcohol (Steadman et al., 1998). Without controlling for these and other factors, we cannot rule out the possibility that higher arrest rates for mentally disordered suspects are due to factors exhibited during encounters with police that increase the risk of arrest for all citizens, regardless of mental disorder. Direct evidence for the criminalization hypothesis requires a main effect of mental disorder on arrest, net of other relevant characteristics of the encounter.

Research on police encounters with non-mentally disordered suspects finds that some characteristics (particularly intoxication and suspect



demeanor) significantly influence police behavior (Engel et al., 2000; Riksheim and Chermak, 1993). In the analyses that follow, suspect characteristics, including sex, race, age, homelessness, alcohol and drug use, disrespect, and noncompliance were measured. Suspect race was coded as white or nonwhite; suspect age was coded as juvenile (i.e., under 18) or adult; suspect socioeconomic status was measured with a crude indicator of apparent homelessness<sup>4</sup>; and alcohol or drug use by suspects was measured based on observable evidence of substance-induced behavior. Suspect demeanor was measured using two dichotomous measures: one based on observers' characterizations of suspect disrespect toward officers prior to arrest and one based on suspect noncompliance (i.e., refusing to comply with officer requests or commands) (Worden and Shepard, 1996; Worden et al., 1996).

Previous police research also shows that the characteristics of the situation (i.e., the relationship between the victim and the suspect, the preference of the victim, and the presence of bystanders) influence police behavior (Mastrofski et al., 2000; Riksheim and Chermak, 1993; Smith and Visser, 1981; Worden, 1989). In the analyses that follow, we measure the relationship between the suspect and the victim using two dichotomous variables: one indicating whether the victim knew the suspect and one for whether the victim and suspect were strangers (the excluded category includes encounters in which no victim was present). In addition, we include dichotomous measures indicating whether the suspect was known to the police officer(s) prior to the encounter, whether the victim(s) requested that police take official action (i.e., arrest) (Mastrofski et al., 2000), whether the encounter was proactive (i.e., initiated by the officer) or reactive (dispatched or otherwise citizen-initiated), and whether the location of the encounter was public or private. Finally, the number of bystanders (those citizens who were present but did not participate in the encounter) was measured as a count variable.

Based on Klinger's (1994) argument about "interaction-phase crime," two dichotomous variables were measured: suspect threat or assault of another citizen during the encounter and threat or assault of a police officer during the encounter. Several legal variables, including evidence of disorderly or illegal conduct, the presence of a weapon, and the seriousness of the offense, also were included. Following Mastrofski et al. (2000:324-325), evidence of criminal behavior is measured as an additive index, in which different point values were assigned based on the strength of the evidence. If the police observed the suspect engaging in an illegal

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4. Persons were classified as apparently homeless if they appeared "not to have a domicile that can shelter them from the elements" or appeared to be without "regular food, shelter, or clothing."

act (or had circumstantial evidence of an illegal act), three points were assigned. Likewise, two points were assigned if the citizen gave the officer a full confession and one point was assigned if the officer was given a partial confession, observed physical evidence implicating the citizen, or heard testimony from other citizens implicating the citizen. The scores were summed for each citizen and ranged from zero to seven. The presence of a weapon was measured based on whether suspects had a weapon in their possession or within a "jump and reach" distance. Finally, following Klinger (1994), a five-point ordinal scale was used to measure the seriousness of the "pre-intervention crime," where 0 = no crime or disorder, 1 = public disorders and victimless crimes, 2 = minor property crime and other misdemeanors, 3 = major property crime and minor violence, and 4 = major violent crime.

Because the POPN project borrowed heavily from observation instruments created for the PSS project, many of the measures contained in the two data sets are comparable. Three differences in measures are noted. First, the relationship between the victim and suspect in the POPN data measures whether the victim and suspect were "well acquainted," whereas the PSS data measures whether the suspect and victim knew one another. Second, suspect noncompliance measured with the POPN data includes suspects' refusals to comply with officer requests or commands (e.g., police requests to leave another person alone or leave the premises, to cease disorderly or illegal behavior, or to control the person or animal responsible for the problem). In contrast, the PSS measure of suspect noncompliance includes passive resistance to officers' authority (i.e., refusing to answer questions or refusing to otherwise cooperate with officers' requests), and verbal resistance (i.e., more active forms of noncompliance, such as arguing with or cursing at an officer). This difference in measurement accounts for the significantly larger percentage of PSS suspects (14%) compared with POPN suspects (1.7%) coded as noncompliant. Finally, two variables gathered by POPN were not measured by PSS and, therefore, are not included in the PSS analyses: observer characterization of the suspect as homeless and evidence of disorderly or illegal conduct.

## RESULTS

### BIVARIATE ANALYSES OF POPN DATA

We begin our analysis with bivariate comparisons of the rates of arrests and characteristics of mentally disordered and non-mentally disordered suspects in the POPN and PSS data (Tables 1 and 2, respectively). As shown, in Table 1, officers in the 1996-1997 POPN study were significantly less likely to arrest mentally disordered citizens compared with non-mentally disordered citizens (7.6% versus 18.2%, chi-square = 4.89;  $p = .031$ ).

Table 1. POPN (1996–1997) Sample Characteristics

Variables	All Suspects ( <i>N</i> = 1,849)	Mentally Disordered Suspects ( <i>N</i> = 66)	Non-mentally Disordered Suspects ( <i>N</i> = 1,783)
Officer Action Arrest	.178 (.383)	.076 (.267)**	.182 (.386)
Suspect Characteristics			
Mentally disordered	.037 (.186)	—	—
Male	.757 (.429)	.636 (.485)*	.762 (.426)
White	.381 (.486)	.606 (.492)***	.373 (.484)
Juvenile	.300 (.459)	.076 (.267)***	.309 (.462)
Suspect appears homeless	.056 (.229)	.182 (.389)***	.051 (.220)
Under influence of alcohol or drugs	.196 (.397)	.303 (.463)*	.192 (.394)
Disrespectful toward officer	.185 (.388)	.303 (.463)**	.181 (.385)
Suspect noncompliant	.017 (.128)	.030 (.173)	.016 (.127)
Situational Characteristics			
Victim and suspect well acquainted	.149 (.356)	.273 (.449)**	.144 (.351)
Victim and suspect strangers	.027 (.161)	.061 (.240)	.025 (.157)
Suspect known to police	.185 (.388)	.197 (.401)	.185 (.388)
Victim requests arrest	.033 (.179)	.030 (.173)	.033 (.179)
Police initiate encounter	.493 (.500)	.227 (.422)***	.503 (.500)
Public location	.889 (.314)	.742 (.441)***	.895 (.307)
Number of bystanders (range = 0–30)	4.39 (5.67)	3.23 (3.02)	4.44 (5.74)
Legal Variables			
Suspect fights with other citizen	.029 (.167)	.061 (.240)	.027 (.164)
Suspect attacks officer	.013 (.113)	.015 (.123)	.013 (.113)
Evidence of disorderly / illegal conduct	1.99 (2.13)	1.88 (2.24)	1.20 (2.12)
Weapon present	.037 (.188)	.091 (.290)*	.035 (.183)
Seriousness of offense (range = 0–4)	1.33 (1.03)	.788 (.937)***	1.35 (1.02)

NOTE: Entries are variable means (or proportions, for dichotomous variables); standard deviations are in parentheses. Asterisks identify statistically significant chi-square associations.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

In addition, mentally disordered suspects were significantly more likely to be female (chi-square = 5.43;  $p = .027$ ), white (chi-square = 14.66;  $p < .001$ ), older (chi-square = 16.41;  $p < .001$ ), homeless or in chronic poverty

(chi-square = 20.69;  $p < .001$ ), intoxicated (chi-square = 4.94;  $p = .039$ ), and disrespectful toward officers (chi-square = 6.33;  $p = .016$ ). In terms of situational variables, Table 1 shows that mentally disordered suspects were significantly more likely to be involved in incidents with victims who were known to them (chi-square = 8.31;  $p = .007$ ), were significantly more likely to be involved in encounters that were citizen-initiated (chi-square = 19.37;  $p < .001$ ), and were more likely to have occurred in a private location (chi-square = 14.94;  $p < .001$ ).

We also found two statistically significant differences in legal variables: Mentally disordered suspects were more likely to have possessed a weapon (chi-square = 5.66;  $p = .032$ ) and were more often involved in offenses that were less serious than were offenses committed by non-mentally disordered suspects (chi-square = 37.18;  $df = 4$ ;  $p < .001$ ). Whereas 6% of mentally disordered suspects were involved in felony offenses, 15% of non-mentally disordered suspects were involved in such offenses.

#### BIVARIATE ANALYSES OF PSS

Table 2 provides descriptive data on mentally disordered and non-mentally disordered suspects in the PSS data. Unlike POPN data, a larger percentage of mentally disordered suspects were arrested (16.2%) compared with non-mentally disordered suspects (13.0%), although the difference was not statistically significant (chi-square = 0.33;  $p = .552$ ). Other general trends regarding the characteristics of mentally disordered suspects, however, are similar across data sets. Mentally disordered suspects encountered by police in 1977 were significantly more likely to be female (chi-square = 3.83;  $p = .068$ ), white (chi-square = 3.11;  $p = .095$ ), older (chi-square = 5.02;  $p = .024$ ), under the influence of drugs or alcohol (chi-square = 13.46;  $p < .001$ ), characterized by observers as disrespectful toward police (chi-square = 4.69;  $p = .040$ ), and noncompliant or verbally resistant (chi-square = 10.58;  $p = .003$ ).

Compared with encounters with non-mentally disordered suspects, encounters with mentally disordered suspects were more likely to be citizen initiated (chi-square = 5.47;  $p = .026$ ). Mentally disordered suspects were somewhat more likely to threaten or assault an officer and have access to a weapon (chi-square = 5.04;  $p = .081$ ; chi-square = 4.20;  $p = .064$ , respectively). Unlike POPN data, PSS results show that mentally disordered suspects committed offenses that were more serious than those committed by non-mentally disordered suspects; 13.5% of mentally disordered suspects were involved in felony offenses, compared with 7.3% of non-mentally disordered suspects (chi-square = 41.73;  $df = 4$ ;  $p < .001$ ). Involvement in more serious offenses by PSS mentally disordered suspects may account for their higher arrest rate compared with mentally disordered suspects in the POPN data.



Table 2. PSS (1977) Sample Characteristics

Variables	All Suspects ( <i>N</i> = 1,392)	Mentally Disordered Suspects ( <i>N</i> = 37)	Non-mentally Disordered Suspects ( <i>N</i> = 1,355)
Officer Action Arrest	.131 (.337)	.162 (.374)	.130 (.336)
Suspect Characteristics			
Mentally disordered	.027 (.161)	—	—
Male	.780 (.414)	.649 (.484)	.784 (.412)
White	.533 (.499)	.676 (.475)	.529 (.499)
Juvenile	.269 (.444)	.108 (.315)*	.274 (.446)
Under influence of alcohol or drugs	.111 (.314)	.297 (.463)***	.106 (.307)
Disrespectful toward officer	.089 (.285)	.189 (.397)*	.086 (.281)
Suspect noncompliant / verbally resistant	.141 (.348)	.324 (.475)**	.136 (.343)
Situational Characteristics			
Victim knows suspect	.300 (.460)	.350 (.480)	.300 (.460)
Victim and suspect strangers	.081 (.270)	.160 (.370)	.079 (.270)
Suspect known to police	.186 (.389)	.297 (.463)	.183 (.387)
Victim requests arrest	.110 (.310)	.140 (.350)	.110 (.310)
Police initiate encounter	.402 (.491)	.216 (.417)*	.407 (.492)
Public location	.657 (.475)	.622 (.492)	.658 (.475)
Number of bystanders (range = 0–30)	3.58 (6.37)	7.03 (9.42)	3.49 (6.24)
Legal Variables			
Suspect fights with other citizen	.017 (.130)	.054 (.229)	.016 (.126)
Suspect attacks officer	.013 (.113)	.054 (.229)	.012 (.108)
Weapon present	.042 (.200)	.108 (.315)	.040 (.196)
Seriousness of offense (range = 0–4)	1.22 (1.02)	1.57 (1.09)***	1.21 (1.02)

NOTE: Entries are variable means (or proportions, for dichotomous variables); standard deviations are in parentheses. Asterisks identify statistically significant chi-square associations.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Descriptive analyses of both POPN and PSS data show that encounters with mentally disordered suspects differ from encounters with other suspects based on individual, situational, and legal characteristics. As a result, one would expect variation in police responses. Yet, we find little support for the criminalization hypothesis. Whereas the 1977 PSS data show higher arrest rates for mentally disordered suspects, the result is not

statistically significant, and whereas the 1996–1997 POPN data show a statistically significant relationship between mental status and arrest, the result is in the opposite direction predicted by the criminalization hypothesis. More rigorous testing of the criminalization hypothesis is provided in the multivariate analyses below.

### MULTIVARIATE RESULTS

We estimate multivariate equations using logistic regression.<sup>5</sup> Table 3 reports the unstandardized logistic regression coefficients and the odds ratios predicting arrest for POPN suspects involved in encounters with police ( $N = 1,849$ ) and those involved in only misdemeanor offenses ( $N = 1,578$ ). As shown in Model A of Table 3, the lower probability of arrest for mentally disordered suspects observed in Table 1 remains after controlling for the other relevant measures. Contrary to the criminalization hypothesis, the odds ratio associated with mental disorder was .35, which means that the odds of being arrested for mentally disordered suspects were reduced by a factor of 2.9 ( $1/.35$ ) compared with nonmentally disordered suspects. The likelihood of arrest was also significantly higher for nontraffic suspects who were male, under the influence of alcohol or drugs, disrespectful toward officers, noncompliant with officers' requests, known to police, in the presence of a victim who requests an arrest, fought with another citizen, attacked the officer, had evidence of wrongdoing, were in possession of a weapon, or involved in a more serious offense.

Model B of Table 3 indicates that many of the significant predictors listed above also significantly predicted arrest for misdemeanor suspects. Most important, however, is that compared with non-mentally disordered suspects, mentally disordered suspects involved in less serious offenses were significantly less likely to be arrested (odds ratio = .34;  $p < .05$ ). That is, the odds of arrest were reduced by a factor of 2.9 ( $1/.34$ ).

Table 4 shows the same analyses for the 1977 PSS data. As shown in both Model A (all suspects,  $N = 1,392$ ) and Model B (misdemeanor suspects,  $N = 1,328$ ), suspects' mental status was not significantly related to arrest. Furthermore, it is important to note that the sign of this variable is negative, consistent with the finding observed in the POPN data (Table 3, Model A). Clearly, this finding does not support the criminalization hypothesis. Several other variables were found to increase the risk of arrest among PSS suspects. These include suspect characteristics (intoxication and noncompliance or verbal resistance toward officers), encounter characteristics (relationship between suspect and victim, suspect known to police, victim request for arrest, and citizen initiated), and legal characteristics (presence of a weapon and seriousness of the offense).

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5. For a detailed description of logistic regression, see Menard (1995).

Table 3. Logistic Regression Predicting Arrest: POPN  
(1996–1997) Data

Variables	Model A All Suspects ( <i>N</i> = 1,849)	Model B Misdemeanor suspects ( <i>N</i> = 1,578)
Mentally Disordered	-1.05* (.35)	-1.09* (.34)
Male	.42* (1.52)	.30 (1.35)
White	-.29 (.75)	-.36* (.70)
Juvenile	.02 (1.02)	.10 (1.11)
Suspect Appears Homeless	-.29 (.75)	-.21 (.81)
Under Influence of Alcohol or Drugs	.81*** (2.26)	.76*** (2.14)
Disrespectful Toward Officer	.53** (1.69)	.57** (1.77)
Suspect Noncompliant	.94* (2.55)	.74 (2.10)
Victim and Suspect Well Acquainted	-.22 (.80)	-.41 (.66)
Victim and Suspect Strangers	-.59 (.56)	-.43 (.65)
Suspect Known to Police	.38* (1.46)	.43* (1.54)
Victim Requests Arrest	.96** (2.62)	.99* (2.68)
Police Initiate Encounter	-.22 (.80)	-.27 (.76)
Public Location	.03 (1.03)	-.46 (.63)
Number of Bystanders	.02 (1.02)	.05** (1.05)
Suspect Fights with Other Citizen	.79* (2.21)	1.01* (2.76)
Suspect Attacks Officer	1.80*** (6.02)	1.78** (5.95)
Evidence of Disorderly/Illegal Conduct	.40*** (1.50)	.38*** (1.46)
Weapon Present	.49 (1.63)	.84** (2.31)
Seriousness of Offense	.45*** (1.57)	—
Constant	-3.98***	-2.91***
Model Chi-Square ( <i>df</i> )	410.15 (20)***	256.69 (19)***
Nagelkerke (pseudo) <i>R</i> <sup>2</sup>	.33	.26

NOTE: Entries are unstandardized coefficients; odds ratios are in parentheses.

\* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001.

Table 4. Logistic Regression Predicting Arrest: PSS (1977) Data

Variables	Model A All Suspects ( <i>N</i> = 1,392)	Model B Misdemeanor Suspects ( <i>N</i> = 1,289)
Mentally Disordered	-.62 (.54)	-.26 (.77)
Male	.33 (1.39)	.34 (1.41)
White	-.33 (.72)	-.25 (.78)
Juvenile	-.01 (.99)	.19 (1.21)
Under Influence of Alcohol or Drugs	1.11*** (3.04)	1.22*** (3.38)
Disrespectful Toward Officers	-.16 (.85)	-.17 (.84)
Suspect Noncompliant/Verbally Resistant	1.45*** (4.28)	1.64*** (5.16)
Victim Knows Suspect	-1.08*** (.34)	-1.03*** (.36)
Victim and Suspect Strangers	-.47 (.63)	-.27 (.76)
Suspect Known to Police	.46* (1.58)	.59** (1.80)
Victim Requests Arrest	2.03*** (7.62)	2.18*** (8.87)
Police Initiate Encounter	-.33 (.72)	-.39 (.68)
Public Location	.30 (1.35)	.27 (1.32)
Number of Bystanders	.03** (1.03)	.04** (1.04)
Suspect Fights with Other Citizen	-.61 (.55)	-.81 (.44)
Suspect Attacks Officer	1.03 (2.80)	.61 (1.84)
Weapon Present	.82* (2.27)	.63* (1.84)
Seriousness of Offense	.34*** (1.41)	—
Constant	-3.36***	-3.26***
Model Chi-Square ( <i>df</i> )	240.45 (18)***	188.53 (17)***
Nagelkerke (pseudo) <i>R</i> <sup>2</sup>	.29	.27

NOTE: Entries are unstandardized coefficients; odds ratios are in parentheses.  
 \* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001.



## DISCUSSION

Our study of police behavior using two large-scale, multisite observational data sets, one from 1977 and one from 1996–1997, does not support the criminalization hypothesis. Rather, we find that controlling for a wide range of relevant factors, police are not more likely to arrest mentally disordered suspects. This finding contradicts results reported by Teplin (1984). Two explanations for this discrepancy seem plausible. First, because of a limited sample size, Teplin could not control for many of the factors known to influence police arrest decisions. Thus, the positive bivariate relationship between mental disorder and arrest reported by Teplin may have been spurious. Indeed, a comparison of the bivariate and multivariate findings for the PSS data support this explanation. For the PSS, the bivariate relationship between mental disorder and arrest, although not significant, was positive, suggesting that mentally disordered persons were more likely to be arrested. However, when legal and extra-legal variables were entered in the multivariate analyses, the sign of this relationship changed, suggesting that the relationship was spurious.

Second, Teplin's (1984) measure of mental disorder was based on clinical criteria rather than officers' (or observers') general perceptions. Thus, a substantial proportion of the "mentally disordered" suspects that Teplin reported as arrested were not perceived as mentally disordered by the arresting officer. In contrast, the current study used a measure of mental disorder that conformed more closely to officers' perceptions. This difference in measurement raises the interesting theoretical possibility that individuals with clinical symptoms of mental disorder may be arrested not because officers are intentionally "criminalizing" them, but because officers fail to perceive the clinical symptoms of mental disorder among those arrested.

Unintended arrests of persons with diagnosable mental disorders may contribute to the disproportionate number of mentally disordered persons in prisons and jails. At the same time, correctional staff may have become more sensitive to the signs of mental disorder and therefore may be more likely to identify inmates as eligible for mental health treatment than they were in the past. As a result, the number of inmates officially classified as mentally disordered might have increased (Lamb and Weinberger, 1998).

We were surprised to find that in the more recent POPN data, mentally disordered suspects were less likely to be involved in serious offenses than were non-mentally disordered suspects. This finding may be related to the operationalization of seriousness and violence in these analyses. Seriousness, as measured here, referred to the level of legal seriousness of the problem that police were called to handle. "Interaction-phase" crime, however, was not a component of this measure (Klinger, 1994). During

encounters with citizens, police may witness violence or be the victim of violence. Indeed, mentally disordered suspects in the POPN data were significantly more likely than were non-mentally disordered suspects to have a weapon present, despite their involvement in offenses that were less serious. Thus, the POPN data suggests that although mentally disordered suspects were involved significantly in less serious offenses than were non-mentally disordered suspects, officers may have had good reason to perceive these situations as dangerous.

These findings have important policy implications. First, officers should be trained to identify signs of mental disorder so as not to be inappropriately swayed toward arrest by aggressive or otherwise confrontational behavioral cues (Steadman et al., 2000). Second, officer training should emphasize alternatives to the use of force, including techniques to deescalate potentially violent situations. In the POPN data, officers used force on 10.8% of mentally disordered suspects compared with 7.8% of non-mentally disordered suspects. For PSS data, the difference was even greater: 13.5% of mentally disordered suspects compared with only 3% of non-mentally disordered suspects.

A larger issue raised by this research is whether officers should use informal means to handle situations involving mentally disordered citizens. Although many have noted the inappropriateness of using the criminal justice system to handle such situations, little attention has been given to the appropriateness of using informal dispositions. Examples of informal handling of mentally disordered suspects include no police action, mediation, separation, lecturing, and transports to homes or homeless shelters (Bittner, 1967a). Reasons cited by officers for handling situations informally range from humanitarian (e.g., "the officer thought he did the right thing by taking the citizen to a place where he could take a shower and have a hot meal for free") to self-serving (e.g., "the officer did not want to transport the citizen because he was sweating profusely and he didn't want him in his take-home patrol car") (narratives from the Project on Policing Neighborhoods).

In one tragic example of officers' informal handling of a mentally disordered person, the citizen's foot was partially amputated after officers on two separate occasions failed to notice that the mentally disturbed citizen—who was blocking traffic and screaming at motorists—was suffering from gangrene in a wound that occurred after his foot had been run over by a car in that same intersection (narratives from the Project on Policing Neighborhoods). Unfortunately, because arrest is not an acceptable course of action in many situations and hospitalization is not a viable alternative due to stringent commitment requirements, officers are often left

with few options other than informal resolution. To avoid problems associated with informal resolution (as noted above), departments should consider developing formal links with mental health service agencies (Borum et al., 1998; Steadman et al., 2000).

Future research should attend to other issues highlighted by this study. For example, we know relatively little about the effects of officers' education and attitudes on their decisions involving mentally disordered suspects. However, ongoing research by LaGrange (2000) suggests that officers' education levels may influence the likelihood of an arrest. LaGrange reports that 12.7% of officers who did not have a four-year degree indicated their willingness to arrest a mentally disordered suspect, compared with 4% of officers with a four-year college degree. Further, although it has been suggested that officers' attitudes may influence their decision making regarding mentally disordered persons (Bittner, 1967a; Teplin and Pruett, 1992), this proposition has not been tested empirically. Differences in dispositions regarding mentally disordered suspects are also likely to exist across policing organizations. For example, a recent study by Steadman et al. (2000) comparing three models of police response to incidents involving mentally disordered suspects found that whereas all three programs had relatively low arrest rates, one program was more likely to resolve incidents on-scene, and another was more likely to make mental health referrals.

In addition, we believe that a full understanding of how officers handle encounters with mentally disordered citizens will require measurement of the community contexts within which such encounters occur. Two aspects of the community context seem especially relevant: the overall levels of crime and deviance in the community and the availability/accessibility of mental health services in the local area. Klinger (1997:296) suggested that, "as district-level rates of crime and other forms of deviance increase. . .deviant acts of a given level of seriousness should receive less vigorous attention." Thus, we would expect a higher rate of informal resolutions among encounters with mentally disordered citizens that occur in socially disorganized, high-crime communities (Silver, 2000). In addition, Bittner (1967a) argued that the perception among officers was that in many jurisdictions, it was difficult to admit mentally disordered citizens for psychiatric care, reducing the likelihood that a mental health referral was made. Thus, we might expect higher rates of arrest in communities where mental health services are unavailable or inaccessible. Further examination of these and other issues raised in this paper must await future research.

Finally, this research, like all secondary observational studies in which the population of interest is relatively rare, is limited due to the relatively small number of police-citizen encounters involving mentally disordered

citizens that were available for analysis. The degree to which our results will generalize to other jurisdictions must be examined in future research. However, it is important to note that the POPN and PSS data are the largest observational studies conducted to date of police-citizen encounters and, therefore, represent the best available data source—and, in the case of POPN, the most recent—for reexamining the criminalization hypothesis. In short, although limited by sample size, the results reported here are the best available using existing data. To overcome this limitation, future data collection efforts will need to oversample calls for service involving mentally disordered persons to obtain a larger and more representative sample of encounters with police.

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