

SUSPECT MENTAL DISORDER AND POLICE USE OF FORCE

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It has been suggested that the police tend to respond to the unusual behaviors of mentally disordered individuals with coercive tactics that should be reserved for criminal offenders, such as arrest. Although recent research tested, and rejected, this perspective regarding arrest decisions, the present study investigated the most coercive form of police authority, the use of force. Using officer self-report data from two municipal law enforcement agencies, the present study investigated whether mentally disordered suspects were more likely than nondisordered suspects to receive physical force from the police. The findings revealed that mentally disordered suspects were significantly more likely to act violently, resist the police, and possess a weapon. After these characteristics were controlled, mentally disordered suspects were not more likely than nondisordered suspects to receive physical force.

Keywords: mental illness; police behavior; use of force; demeanor

It has been suggested that the police tend to act coercively toward persons with mental disorders, using their coercive powers to control mentally disordered individuals who had not violated the law, committed public order offenses, or simply displayed other behaviors symptomatic of their illness (Abramson, 1972; Lamb & Weinberger, 1998; Teplin, 1983). Most of the discussion about the inappropriate treatment of mentally disordered persons by the police has focused on the coercive acts of involuntary transportation (King & Dunn, 2004) and arrest (Engel & Silver, 2001; Novak & Engel, 2005; Teplin, 1984). The most coercive of police actions, however, is the use of physical force. Unfortunately, scant attention has been paid to the relationship between mental illness and police use of force.

The published empirical works that have investigated the influence of citizen mental illness on police officer arrest decisions have produced conflicting results (Engel & Silver, 2001; Novak & Engel, 2005; Teplin, 1984), yet the majority of the evidence favors the view that the police are more lenient toward the mentally ill. No empirical study, however, has specifically focused on the relationship between mentally disordered persons and police officer uses of force. The present study endeavored to address this shortfall and answer three basic questions. First, is there evidence that force is used disproportionately against individuals with a mental disorder? Second, are mentally disordered suspects more likely than those without mental disorders to physically resist police officers? Third, is suspect mental disorder a significant predictor of police use of force after controlling for suspect resistance and other relevant factors associated with use of force? The present study addressed these questions using officer-reported data from two municipal law enforcement agencies in one Pacific northwestern state.

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MENTALLY DISORDERED PERSONS AND POLICE COERCION

Most of the previous research on the relationship between mental illness and police use of coercion has relied on the criminalization hypotheses as a theoretical foundation. The criminalization hypothesis (Abramson, 1972) suggested that mental illness may be seen as a quasicriminal factor, and as a result, agents of the criminal justice system will differentially apply criminal sanctions to this population. The result is that police may criminalize mental illness by vigorously enforcing the law, bringing more people with mental illness to the attention of the courts, resulting in more people who are mentally ill being sentenced to correctional institutions or community corrections, and so forth. To be sure, mentally disordered persons are overrepresented among those incarcerated in the United States (Lurigio, 2000; Skull, 1977; Teplin, 1983). Whereas it was estimated that mentally disordered persons make up less than 5% of the U.S. population, approximately 16% of those in jail and prison are classified as mentally disordered (Lurigio, 2000). This overrepresentation of mentally disordered persons within jail and prison populations suggested to some that the police routinely use the coercive action of arrest to deal with the unusual and “troublesome” behaviors mentally disordered persons displayed (Abramson, 1972; Lamb & Weinberger, 1998; Teplin, 1983).

Although the criminalization hypothesis has often been used as a theoretical basis for investigations of police interactions with mentally ill persons (e.g., Teplin, 1984; Engel & Silver, 2001; Novak & Engel, 2005), Van Maanen (1978) expressed a different theoretical viewpoint. Van Maanen suggested that the degree of police leniency or coercion a civilian received depended on two factors: first, whether the officer believed that the individual was cognizant that his or her behavior was inappropriate, and second, whether the officer believed that the person could have acted differently under the circumstances. Van Maanen proposed that police officers tended to label persons negatively when they did not cooperate with the officers’ requests, and the officers believed that they were capable of being cooperative if they had so chosen. If this was the case, the officers felt that the individual deserved to be punished through chastisement, full enforcement of the law, and/or some form of street justice (unauthorized use of force). If the officers believed that the troublesome behavior was unintentional, or that the person had little control over this behavior (such as someone suffering from a severe mental disorder), the officers were less likely to find the person culpable for his or her actions, moving the officers to leniency (Van Maanen, 1978).

The empirical evidence on police interactions with mentally disordered persons, however, seems to have produced somewhat conflicting results. Teplin (1984) conducted an observational study of 1,382 police–public encounters in Chicago to compare the arrest rates between those who appeared to suffer a severe mental disorder and those who appeared to lack a mental disorder. She found that whereas 28% of the nondisordered encountered were arrested, 47% of those with mental disorders were arrested. Those with mental disorders were almost twice as likely to be arrested as those without mental disorders. Teplin failed, however, to control for the types of illegal behaviors in which these people may have engaged.

Engel and Silver (2001) used observational data from two very large, multiagency studies to determine what legal and extralegal factors were correlated with the higher arrest rate for mentally disordered persons. Their first data source was from the Police Services Study (PSS), which included observational data on 5,688 police–public encounters involving

24 law enforcement agencies across three metropolitan areas (Rochester, New York; St. Louis, Missouri; and St. Petersburg, Florida). In this 1977 data, 13% of the nondisordered individuals encountered were arrested, and 16% of the mentally disordered individuals were arrested. Unlike Teplin's (1984) study, the mentally disordered persons were only 3% more likely to be arrested in the PSS sample. Furthermore, after controlling for demographic characteristics and behavioral variables, multivariate analyses found that mental disorder did not significantly predict whether the individual would be arrested. The data in that sample suggested that the mentally disordered persons were significantly more likely to commit a serious criminal offense, physically resist the police, and be intoxicated. These factors were the primary contributors to the higher arrest rate for the mentally ill individuals (Engel & Silver, 2001).

The second source of observational data used by Engel and Silver (2001) came from the Project on Policing Neighborhoods (POPEN), which involved 1,849 police-suspect encounters in Indianapolis, Indiana, and St. Petersburg, Florida, in 1996 and 1997. In these interactions, approximately 8% of nondisordered persons contacted were arrested, and 18% of mentally disordered persons were arrested. Multivariate analysis, however, again revealed that the mentally disordered people contacted by the police were more likely to have committed a serious criminal offense, resist officer commands, and be intoxicated. In spite of these characteristics, the appearance of a mental disorder actually decreased the likelihood of arrest in the POPEN study data. Apparently, the officers observed in Indianapolis and St. Petersburg exercised more lenience toward those who appeared mentally disordered, yet because they engaged in serious and violent criminal acts more frequently, they were still arrested at higher rates (Engel & Silver, 2001).

Novak and Engel (2005) conducted a similar analysis using observational data from 2,671 police-public encounters by the police in Cincinnati, Ohio, during 1997 and 1998. Their findings continued to contradict with the criminalization hypothesis (Abramson, 1972; Lamb & Weinberger, 1998). In this Cincinnati data, only 20% of the mentally disordered persons contacted were arrested, whereas 28% of nondisordered persons were arrested. Multivariate analysis revealed, again, that mentally disordered persons encountered by the police were more likely to have committed a serious offense, be intoxicated, and resist the police. Even though the mentally disordered individuals encountered in this sample were more likely to present these legal causes for arrest, the officers observed were actually less likely to arrest them as compared to nondisordered persons (Novak & Engel, 2005). Thus, the majority of the limited evidence on officer arrest decisions suggests that the police show lenience toward the mentally disordered, yet because they disproportionately committed serious crimes and resisted the police, they are disproportionately represented in arrest statistics.

Arrest, however, is not the only coercive form of police action. Another coercive police action discussed in the literature regarding mentally disordered persons is the involuntary transportation of troublesome persons to another jurisdiction. King and Dunn (2004) introduced the label "Police-Initiated Trans-jurisdictional Transport (PITT) of troublesome persons" (p. 341) to describe the unofficial police practice of handling people who created unrest within the community. They presented evidence from qualitative research studies and newspaper articles to suggest that law enforcement officers routinely handled troublesome people, including those with mental disorders, by involuntarily transporting them out

of the jurisdiction so that they would no longer pose a problem for the officers (King & Dunn, 2004).

Other studies provided corroborating evidence that officers have used this method of resolving disturbances involving people with mental disorders. Evidence existed that this technique of “dumping” mentally disordered individuals in other jurisdictions was also sometimes considered preferential (in the minds of some officers) to making an arrest (Panzarella & Alicea, 1997; Ruiz, 1993). Some officers view transporting troublesome mentally disordered people out of the jurisdiction as more humane than placing them under arrest for minor offenses, such as disorderly conduct or public intoxication. One study suggested that this practice is less common in areas with better community mental health resources (Wells & Schafer, 2006). In any case, no empirical evidence has been presented to confirm that this practice is widespread, used disproportionately against mentally disordered persons, or is frequently used without there having been an actual violation of the criminal law.

INDIVIDUAL AND SITUATIONAL CORRELATES OF POLICE USE OF FORCE

Interestingly, little attention has been paid in the empirical literature to the relationship between mentally disordered persons and the most coercive of police actions, the use of physical force. The empirical literature on police use of force has identified several key individual, officer, and situational characteristics that were most often correlated with incidences of police use of physical force. The strongest of these predictors were generally behavioral characteristics, most notably, resistance. Analyzing observational data collected in Chicago, Boston, and Washington, D.C., during the late 1960s, Friedrich (1980) found that those most likely to be recipients of police physical force were criminal suspects who were physically aggressive or noncompliant with the police and displayed a hostile demeanor. Worden (1995) later used observational data from the PSS and also found that the likelihood of use of physical force by officers during police–public encounters was significantly higher when officers’ commands were ignored, physical resistance occurred, a weapon was present, and a hostile demeanor was displayed. A third study, by Terrill and Mastrofski (2002), used data from the POPN. They found that those who failed to comply with an officer’s directions, were outright physically aggressive, or possessed a weapon were at the greatest risk for use of force.

Garner, Schade, Hepburn, and Buchanan (1995) collected use-of-force data on all arrests made by Phoenix, Arizona, police officers during a 2-week period in the summer of 1994. Even though these data came from officer self-reports about their own actions during arrests, the findings were consistent with those of observational studies of police, as resistance and possession of a weapon were the greatest predictors of use of force. Garner, Maxwell, and Heraux (2002) conducted another study using officer-reported data on use of force for more than 7,500 arrests by six large law enforcement agencies in 1996 and 1997. Resistance, a hostile demeanor, and possession of a weapon were, again, revealed as the greatest predictors of use of force.

In an investigation of whether police use of force was different in small towns, as opposed to large urban agencies, Terrill, Leinfelt, and Kwak (2008) reviewed 3,264 arrest reports from one small city police agency in the Midwest. They found that incidences of

use of force were somewhat higher in this small city as compared to previous studies in urban areas, but the correlates to use of force remained relatively similar to those found in urban areas. People were most likely to be subjected to police use of force when they resisted officer commands. Lawton (2007) used officer self-report arrest data from the Philadelphia Police Department to look specifically at nonlethal use of force, again revealing the importance of resistance and demeanor in predicting use of force.

Combining data from a nationwide phone survey about police–public contacts and a national survey of arrestees processed in a national sample of local jails, Hickman, Piquero, and Garner (2008) conducted a study of the prevalence and nature of police use of force. The data from their enormous sample of almost 84,000 persons revealed that police use of force was indeed rare, as only 1.5% of contacts resulted in force or even the threat of force. Furthermore, as with the observational data and the self-report data from police officers, the strongest predictors of the likelihood and severity of police use of force were the degree of resistance and the hostility level of the individual encountered (Hickman et al., 2008).

The literature has also revealed other factors as weaker and less consistent correlates of police use of force. Intoxicated persons (Friedrich, 1980; Garner et al., 1995, 2002; Lawton, 2007; Terrill et al., 2008; Terrill & Mastrofski, 2002; Worden, 1995), males (Garner et al., 1995, 2002; Terrill & Mastrofski, 2002; Worden, 1995), and non-Whites (Garner et al., 2002; Terrill et al., 2008; Terrill & Mastrofski, 2002; Worden, 1995) were often found to be those most likely to receive police use of force. Some studies have also found that younger adults were recipients of police force more than older (Terrill & Mastrofski, 2002; Worden, 1995), whereas others have found no correlation between age and police use of force (Lawton, 2007; Terrill et al., 2008).

Only two published use-of-force studies measured whether the person contacted by the police appeared to be mentally disordered. Kaminski, DiGiovanni, and Downs (2004) reviewed the arrest and use-of-force reports from 2,060 arrests made by the police in one city in the southeastern United States. They included an independent variable they referred to as “judgmentally impaired,” which included persons who appeared to be mentally disordered, and also those who appeared to be intoxicated or under the influence of drugs. After gender, race, resistance, and possession of a weapon were controlled, persons who were judgmentally impaired were 37% more likely to experience minor force, and 57% more likely to experience serious force, than those who were not deemed judgmentally impaired (Kaminski et al., 2004). Unfortunately, as intoxication was often found to be a correlate of police use of force (Friedrich, 1980; Garner et al., 1995, 2002; Lawton, 2007; Terrill et al., 2008; Terrill & Mastrofski, 2002; Worden, 1995), combining intoxication with mental disorder seriously damaged the validity of this measure and its empirical results.

In the POPN data used by Terrill and Mastrofski (2002), however, mental impairment was measured separately from intoxication, and was operationalized as whether a person showed behavioral indicators of mental illness. Using this measure of mental impairment in their multivariate analysis, they found that mental impairment was not significantly correlated with officer use of force after controlling for such important correlates as resistance, the presence of a weapon, and demeanor (Terrill & Mastrofski, 2002). It appeared that mentally disordered persons were not more or less likely to receive force after other relevant factors were controlled.

Some officer-level characteristics were revealed as predictors of use of force, but the evidence was weak and inconsistent. McElvain and Kposowa (2008) and Garner and associates

(1995, 2002), for example, found that male officers were more likely than females to use force. Other studies found no differences in officer sex in the use of force (Lawton, 2007; Terrill et al., 2008; Terrill & Mastrofski, 2002). Some studies found younger and less experienced officers were more likely to use force (Garner et al., 2002; Kaminski et al., 2004; McElvain & Kposowa, 2008; Terrill & Mastrofski, 2002), whereas others did not detect differences by officer age or experience (Garner et al., 1995; Lawton, 2007; Terrill et al., 2008; Worden, 1995). The only consistent finding involving officer characteristics and use of force was that officer race has been consistently unrelated to use of force (Garner et al., 1995, 2002; Lawton, 2007; McElvain & Kposowa, 2008; Terrill & Mastrofski, 2002; Worden, 1995).

Finally, two incident-level characteristics were correlated with police officer use of force. First, police–public contacts that were officer initiated—as opposed to in response to a 911 call—were more likely to result in use of force (Garner et al., 2002; Terrill et al., 2008; Terrill & Mastrofski, 2002). Second, police–public contacts involving the presence of bystanders (including other officers) were more likely to result in use of force by the police (Friedrich, 1980; Garner et al., 1995; 2002; Lawton, 2007; Terrill & Mastrofski, 2002), as some officers may feel more pressure to avoid appearing passive about handling the situation if they have an audience (Friedrich, 1980).

In summary, studies based on self-reports by officers, self-reports from the public, and direct observation of officers agreed that those most likely to be recipients of physical force from the police are those who resisted officers, possessed a weapon, and displayed a hostile demeanor. To a lesser extent, force was more likely with those who are male, non-White, and intoxicated, especially when they were encountered by less experienced officers conducting a proactive stop in the presence of bystanders. Is there the possibility that mentally disordered persons are at increased risk of receiving physical force because they are more likely to display the suspect characteristics most associated with use of force? Specifically, given the attributes of their mental disorder and their associated reactions to frightening circumstances, people with mental disorders may have a higher likelihood than the general population to display a hostile demeanor, brandish a weapon, or fail to comply with an officer's commands. Some of the literature on the behavior of mentally disordered individuals appears to support such a concern.

MENTAL DISORDER AND AGGRESSIVE BEHAVIOR

In their survey data of police–public contacts, Hickman and associates (2008) found that respondent mental disorder was not correlated with resisting arrest or assaulting the police. Although there may be some face-saving biases or inaccuracies in the self-reported recollections of mentally disordered individuals contacted by the police, the empirical research literature has also suggested that mentally disordered persons in society are no more hostile or violent than the general population (Mulvey, 1994; Pilgrim, 2003). There are, however, four notable exceptions to this broad statement.

First, some specific disorders are correlated with higher risk of hostile and violent behavior. In a comparison survey of 232 mental facility patients and 521 nondisordered persons, Link, Andrews, and Cullen (1992) found that those with a mental disorder with psychotic symptoms were significantly more likely to self-report engaging in both illegal and violent behavior. This effect remained significant even after controlling for demographic, socioeconomic,

and community context variables. In another study, Swanson, Borum, Swartz, and Monahan (1996) used community survey data for 10,066 residents from three large U.S. cities. They found that persons who suffered from a mental disorder that included psychotic and delusional characteristics were 5 times more likely to have recently engaged in violence than persons without a mental disorder.

Second, although most mentally disordered individuals control any tendencies toward antisocial behavior through proper treatment and medication regimens, when these regimens are not followed, individuals' control over their behaviors diminishes significantly. Using state- and national-level survey data, Swanson, Estroff, Swartz, and Borum (1997) found that those with personality disorders that included psychotic features were at an even higher risk of committing violence when they were no longer under the care of a community mental health provider. The most important aspect of failure to maintain treatment, with respect to violent behavior, was the refusal to take one's prescribed medications, as Swartz et al. (1998b) found that medication noncompliance almost tripled the likelihood of violent acts by persons suffering delusional and psychotic symptoms.

Third, the use of alcohol or illegal drugs aggravates the symptoms of mental disorder and nullifies the effects of prescribed medications, lowering the individuals' levels of self-control. Significant evidence suggested that alcohol and substance abuse by individuals diagnosed with schizophrenia or psychotic personality disorders was significantly associated with serious violent acts in the community by these individuals (Arseneault, Moffitt, Caspi, Taylor, & Silva, 2000; Swanson, Borum, Swartz, & Hiday, 1999; Swanson et al., 1997; Swartz et al., 1998a, 1998b; Taylor et al., 1998). Depending on the study, these mentally disordered individuals were between 3 and 6 times more likely than nondisordered persons to commit a serious violent offense when under the influence of alcohol or an illegal drug.

Fourth, when experiencing stressful life events (such as homelessness or interpersonal conflicts), persons with mental disorders experience much stronger negative emotions than those that are experienced by nondisordered individuals. Silver and Teasdale (2005) found that stressful life events, and impaired social support for dealing with these problems, explained a significant amount of the variation in the use of violence among mentally disordered individuals. McNiel and Binder (2005) found that clients who received emergency psychiatric services in one city were more likely to have engaged in violence when homeless.

Although the mentally disordered population is generally not any more prone to violence than the nondisordered population, research has demonstrated that a subpopulation of violent mentally disordered persons exists. As discussed, this group consisted primarily of persons with personality disorders with psychotic or delusional features. The members of this group are most likely to act violently when they are avoiding treatment, abusing drugs or alcohol, and experiencing stressful life events, such as homelessness. Thus, the members of this subpopulation share characteristics that are also likely to contribute to contacts with the police. As a result, it is possible that the segment of the mentally disordered population that comes into contact with the police the most disproportionately resists officers, acts violently, and displays a hostile demeanor. Some empirical evidence to support this position exists.

Three studies from the policing literature suggested that those with mental disorders are more likely than those without disorders to display a hostile demeanor during interactions with the police (Engel & Silver, 2001; McCluskey, Mastrofski, & Parks, 1999; Novak & Engel, 2005). Furthermore, Silver, Felson, and Vaneseltine (2008) found that mentally disordered

persons processed by the criminal justice system were more likely than nondisordered persons to have committed a violent offense. If it is found that police officers disproportionately used physical force against the mentally disordered, this could be because the mentally disordered persons contacted most by the police were disproportionately violent toward the officers. Therefore, the present study sought to determine whether mentally disordered suspects encountered by the police are more verbally or physically hostile toward the police than nondisordered suspects. It also sought to determine what effect controlling for this heightened propensity for hostility had on the relationship between suspect mental illness and police use of force.

METHOD

DATA AND PROCEDURE

The data set used was created by Alpert and Dunham (2000) and is available from the Inter-University Consortium for Political and Social Research.¹ These data were collected from the police departments in Eugene and Springfield, Oregon, and involved police officer interactions with 619 criminal suspects during April 1995. The data were collected as part of a larger study to identify the requisite physical abilities for police work to establish bona fide minimum physical fitness requirements for police officer applicants that would be able to stand up to legal challenges (Alpert & Dunham, 2000). The use-of-force data were created from items on the Police Officers' Essential Physical Work Report (POEPWR) forms that were completed by patrol officers with these two agencies from approximately 12,000 total officer–citizen interactions. Only the officer–citizen interactions involving a criminal suspect were included in this use-of-force data set.

Although the data came from officer self-reports, it can be argued that the validity of the data was high. The POEPWR form collected data on a broad range of police physical work activities, not just the use of force. The data were not collected with the intent to evaluate the force used by the police, and the data included all police–public contacts, rather than being limited to only use-of-force situations. As a result, it was a less obtrusive measure of use of force than an official departmental use-of-force report or a research data collection form explicitly designed to study officer use of force (Alpert & Dunham, 2000).

DEPENDENT VARIABLES

Three dependent measures of use of force were used in this study. Two simple dichotomous variables were created: one a measure of any force and the other a measure of only serious force. The measure of any force included any physical touching with the exception of searches or handcuffing. The serious-force measure included any officer physical action involving a strike (kick or punch) or a weapon (baton, pepper spray, Taser, flashlight, firearm). Each was measured as a dichotomous dummy variable, such as force or no force and serious force or no serious force. The descriptive statistics for these two dependent variables are presented in Table 1.

Almost 34% of these police–suspect encounters resulted in any use of force by the officer. In light of the previous literature on police use of force (Geller & Toch, 1995; Hickman et al., 2008), this was a rather high rate. This may have been attributable to four factors. First,

TABLE 1: Sample Descriptive Statistics (N = 619)

<i>Variable</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Standard Deviation</i>
Dependent variables				
Any use of force	0	1	0.34	0.488
Serious use of force	0	1	0.06	0.243
Ordinal use of force	0	7	0.76	1.438
Suspect characteristics				
Mentally unstable	0	1	0.10	0.305
Male	0	1	0.85	0.353
Age	12	86	28.62	8.861
Under the influence of drugs/alcohol	0	1	0.20	0.402
Abusive demeanor	0	1	0.44	0.497
Possessed a weapon	0	1	0.09	0.282
Resisted officer—grappled	0	1	0.07	0.260
Resisted officer—struck	0	1	0.05	0.225
Officer characteristics				
Male	0	1	0.86	0.345
Years of police experience	1	34	11.53	7.596
Situational characteristics				
Proactive encounter	0	1	0.29	0.454
Other officers present	0	1	0.44	0.497
Public location	0	1	0.74	0.436

previous studies have produced use-of-force rates that have ranged from 1% to 35%, primarily because of methodological differences in how use of force was operationalized and the denominator used to determine the rate, such as total public contacts or just contacts with criminal suspects (Hickman et al., 2008). Second, although the original study evaluated all police–public interactions, the data set included only interactions with criminal suspects. In fact, only 1.8% of all of the approximately 12,000 calls for service handled by these two agencies resulted in any use of force.

Third, the measure of use of force here was very liberal and included any touching of a suspect, such as holding someone against the side of a car. As the purpose of the data collection was to measure physical activities, some of the actions measured may not have been classified in the officers' minds as physical force had the data been collected as part of an official use-of-force report. Fourth, Terrill and associates (2008) found that smaller city agencies had higher rates of use of force. Eugene and Springfield are small cities of less than 150,000 in population at the time of the study, so perhaps rates of use of force were higher because these were smaller communities. In any event, serious use of force was detected far less often. Only 7% of the suspect encounters resulted in serious force.

The application of physical force by the police, however, is more complex than a simple dichotomy. There are a variety of physical tactics the police use that can be arranged into a scale from least to most severe in risk of pain and injury. In fact, use-of-force policies and training manuals commonly refer to a continuum of force. The activities, tactic, and weapons included in these continuums vary by department, but the common theme is a notion of a progressively increasing severity of officer response (Alpert & Dunham, 1999; Desmedt, 1984; Garner & Maxwell, 2002). Therefore a third, ordinal level measure of force was also used. This measure was scored 0 = *no force*, 1 = *arm or wrist holds*, 2 = *takedowns*, 3 = *wrestling*, 4 = *punches or kicks*, 5 = *chemical spray*, 6 = *baton or flashlight strikes*, or 7 = *firearm threatened or used*. As some incidents involved the use of several

techniques, the most severe technique applied by officers in each encounter was scored. Table 1 reveals that the use-of-force techniques ranged from 0 to 7, and arm or wrist hold was the most frequent technique (27% of incidents).

INDEPENDENT VARIABLES

The primary exogenous variable of interest was whether the reporting officer perceived that the suspect suffered from a mental disorder. The POEPWR form asked reporting officers to indicate whether they perceived the suspect's mental state was "mentally unstable." Although this measure relied on the officers' perceptions, the study was trying to determine whether officers behaved differently when they perceived the suspect to be mentally disordered. Therefore, the officers' perception, rather than reality, was more important. Table 1 reveals that 62 (10%) of the 619 police-suspect encounters involved a suspect the officer perceived as mentally unstable.

Other independent variables were also included in the models to control for the previously identified common correlates of use of force. The suspect's gender and age were available in the data set and were included, as males and younger suspects were sometimes recipients of force more frequently than females and older suspects. The POEPWR form asked the reporting officers to indicate whether the suspect had been using drugs or alcohol, and this measure was included as a proxy measure of alcohol intoxication, another common correlate of use of force. The reporting officers were directed to indicate whether the suspect displayed an abusive demeanor, and this measure was included in light of evidence of a correlation between suspect demeanor and officer use of force. With the exception of suspect age, all of these variables were dichotomous measures.

Whether the suspect possessed a weapon and whether the suspect resisted officers had been strong predictors of officer use of force and are the legal justification for the proper use of force. Data existed to create a dichotomous measure of whether the suspect possessed a weapon. Data were also available on the suspect's level of resistance, allowing the creation of two dichotomous measures of resistance. The first measured whether or not the suspect resisted officers by wrestling or grappling with them, such as pulling away or trying to pry free from the officers' grasp. The second measured whether the suspect resisted officers by striking them with hands and feet or with a weapon. These measures allowed differentiation from resistance that involved simply having difficulty complying with officers' commands, which was expected as common with severely mentally disordered individuals in crisis.

Two relevant measures of officer characteristics were available and were included. As some studies have revealed that male officers were more likely to use force than female officers, officer gender was included. The previous literature also suggested that more experienced officers used force less frequently than rookie officers; therefore, a measure of years of officer tenure was added. Three situational variables were included in the analysis: proactive encounter, presence of other officers, and public location. Proactive encounters were found to increase the likelihood of force when compared to reactive encounters originating in a public request for assistance. Whether other officers were present and whether the location was a public location were dichotomous proxy measures for the presence of bystanders, another occasional correlate of use of force.

TABLE 2: Use-of-Force Rates Toward Mentally Disordered and Nondisordered Suspects

<i>Suspect Group</i>	<i>No Force Used n (%)</i>	<i>Force Used n (%)</i>	<i>Total N (%)</i>
Mentally unstable	49 (76.6)	15 (23.4)	64 (100.0)
Not mentally unstable	362 (65.2)	193 (34.8)	555 (100.0)
Chi-square	42.083***		
	<i>No Serious Force Used n (%)</i>	<i>Serious Force Used n (%)</i>	<i>Total N (%)</i>
Mentally unstable	53 (82.8)	11 (17.2)	64 (100.0)
Not mentally unstable	527 (95.0)	28 (5.0)	555 (100.0)
Chi-square	14.331***		

*** $p < .001$.

RESULTS

The first analysis conducted was to determine whether the suspects perceived as mentally unstable were more likely to be recipients of officer use of force. Table 2 reveals the results of this analysis. Regarding any use of force, mentally unstable suspects were less likely than mentally stable suspects to receive force. Only 23.4% of the mentally unstable suspects received some level of force, whereas 34.8% of those not perceived as mentally unstable received any coercive force. A chi-square test revealed this difference to be statistically significant with an alpha level of less than .001. The findings for serious uses of force, however, were reversed. Seventeen percent of mentally unstable suspects received this level of force, whereas only 5% of mentally stable suspects received serious force. Again, a chi-square test revealed that this difference was statistically significant. Therefore, although mentally unstable persons were less likely to be recipients of force in general, when serious force was used against mentally unstable suspects, it was disproportionate.

This simple cross-tabulation, however, did not control for the individual, officer, and situational characteristics that may have contributed to this outcome. It was possible that mental instability was correlated with other characteristics that contributed to the use of force. Table 3 reveals the bivariate correlations among the independent variables in the study. Beyond demonstrating a lack of collinearity among the predictor variables, this table also reveals that suspect mental instability was significantly correlated with four of the suspect-level control variables. Mental instability was positively correlated with using alcohol or drugs, displaying an abusive demeanor, possessing a weapon, and serious resistance by striking officers. Therefore, it was possible that mentally unstable suspects were more likely to receive serious coercive force because they were more likely to be intoxicated, abusive, or armed or to assault officers. To control for these correlations, multivariate analyses were in order.

Three multivariate tests were conducted and their results are presented in Table 4. The first test regressed the dichotomous variable of any force on the exogenous variables using logistic regression. The resulting standardized coefficients, standard errors, and odds ratios are presented in Table 4 as Model 1. Many of the correlates of use of force previously identified by the literature were significant predictors of force in this sample as well. Suspect resistance was the greatest predictor of officer use of force, as resistance by grappling increased the likelihood of force 20 times, and resistance by striking officers increased the

TABLE 3: Independent Variable Zero-Order Pearson's *r* Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Mentally unstable	—												
2. Suspect male	.02	—											
3. Suspect age	-.04	-.04	—										
4. Drugs/Alcohol	.17***	.03	.13**	—									
5. Abusive demeanor	.39***	-.03	.08*	.42**	—								
6. Weapon	.40***	.10*	-.02	.00	.27**	—							
7. Resist-grab	.05	.01	-.05	.19**	.31***	.04	—						
8. Resist-impact	.30***	.06	-.04	-.03	.23***	.39***	-.06	—					
9. Male officer	.04	.02	.01	-.06	-.02	.04	.11**	.07	—				
10. Officer tenure	.02	-.09*	.07	-.02	.02	.01	.05	.06	.30***	—			
11. Proactive	.02	.05	.03	.05	.03	.04	.00	.01	-.01	-.14**	—		
12. Officers present	.06	.00	.00	.00	.12**	.11**	.04	.08	.00	-.07	-.15***	—	
13. Public location	-.05	.10*	-.03	.01	-.07	.06	-.05	-.01	-.02	-.06	-.28***	-.21***	—

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

TABLE 4: Multivariate Regression of Use of Force

Variable	Model 1		Model 2		Model 3
	Coefficient (SE)	Odds Ratio	Coefficient (SE)	Odds Ratio	Coefficient (SE)
Suspect characteristics					
Mentally unstable	0.75 (0.41)	2.11	-0.37 (0.56)	0.69	0.28 (0.32)
Male	0.21 (0.28)	1.23	1.68* (1.05)	5.37	0.33 (0.27)
Age	0.00 (0.01)	1.00	-0.02 (0.02)	0.98	-0.01 (0.01)
Drugs/Alcohol	0.14 (0.29)	1.07	0.32 (0.50)	1.03	0.22 (0.25)
Abusive demeanor	0.96*** (0.26)	2.61	1.86** (0.64)	6.42	1.15*** (0.24)
Possessed a weapon	1.05** (0.41)	2.85	0.44 (0.55)	1.56	1.16*** (0.32)
Resistant-grabbed	3.02** (0.63)	20.38	2.01*** (0.52)	7.44	2.63*** (0.34)
Resistant-impact	1.38* (0.54)	3.98	2.49*** (0.55)	12.04	2.01*** (0.38)
Officer characteristics					
Male	0.75* (0.30)	2.11	0.52 (0.80)	1.67	0.74* (0.29)
Tenure	-0.05** (0.01)	0.96	-0.04 (0.03)	0.96	-0.03** (0.01)
Situational characteristics					
Proactive encounter	0.57* (0.22)	1.76	1.06* (0.43)	2.90	0.69*** (0.20)
Other officers present	0.36 (0.20)	1.44	-0.12 (0.42)	0.89	0.29 (0.19)
Public location	0.06 (0.25)	1.06	-0.14 (0.49)	0.87	0.09 (0.22)
Model chi-square	184.39***		91.32***		246.21***
Pseudo R-square	0.35		0.37		0.37

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

odds of use of force by almost 4 times. Possession of a weapon by the suspect also increased the likelihood of use of force by almost 3 times. These findings were not unexpected, as the law permits officers the use of force when faced with physical resistance or immediate dangers to their safety (*Tennessee v. Garner*, 1985). Other statistically significant correlates of any use of force included the display of an abusive demeanor by the suspect, a proactive initiation of the encounter by the police, being a male officer, and having less experience as an officer.

The focus of this study, however, was the individual's perceived mental state. In the cross-tabulation found in Table 2, when considering the use of any force, those perceived as mentally unstable were significantly less likely to be a recipient of any coercive force. In Model 1 of Table 4, however, after controlling for other relevant contextual variables, the suspects' perceived mental state was not significantly correlated with whether the police used force. This suggested that the lower likelihood of use of force against mentally unstable persons was caused by a spurious correlation, and in fact, suspect mental instability and any use of force were both correlated with resistance through strikes, the possession of a weapon, and the presentation of a hostile demeanor.

The second logistic regression test regressed the dichotomous variable of serious force on the predictors with logistic regression. The resulting standardized coefficients, standard errors, and odds ratios are presented in Table 4 as Model 2. For a second time, resistance measures were the strongest predictors, as resistance by grappling with officers increased the likelihood of serious use of force more than 7 times, and resistance by striking an officer increased the odds of serious use of force by 12 times. An abusive demeanor also increased the odds of use of serious force by almost 6.5 times. Most importantly for this analysis, however, being perceived as mentally unstable was not a significant predictor after controlling for the offender, officer, and situational characteristics.

Model 3 involved an ordinal regression analysis measuring the impact of the exogenous variables on the ordinal level measure of use of force. Model 3 of Table 4 reveals the standardized correlation coefficients of this analysis and, again, demonstrates that perceived mental instability had no statistically significant effect on the degree of use of force encountered after controlling for physical resistance, the possession of a weapon, and an abusive demeanor.

The results of these multivariate tests revealed the possibility that the mentally unstable suspects in the sample were more likely to physically resist and assault officers and possess a weapon than those suspects not deemed mentally unstable. Cross-tabulations were conducted (not shown here in tabular form) to determine whether this was in fact the case. Approximately 10.9% of the mentally unstable suspects reportedly resisted by grabbing or wrestling with officers, compared to only 7% of the rest of the sample. Twenty-five percent of the mentally unstable suspects resisted arrest by physically assaulting officers, whereas only 3.1% of the rest of the sample resisted in this manner. Whereas only 4.9% of the suspects who were not mentally unstable possessed a weapon, 42.2% of the mentally unstable suspects reportedly had possession of an instrument that the officers perceived as a weapon. Chi-square tests revealed that all three of these comparisons produced statistically significant differences between the mentally unstable suspects and the other suspects in the sample.

DISCUSSION AND CONCLUSION

This study provided four important findings. First, it appeared that physical force, in general, was used less often against those that the officers perceived as mentally unstable than against individuals the officers perceived as mentally stable. In the use of serious physical force, however, those labeled by the police as mentally unstable were significantly more likely to be recipients of officer use of force involving strikes and weapons. Second, after controlling for common individual and situational level correlates of use of force, suspect mental instability was no longer significantly correlated with any of the forms of force evaluated here. Third, all suspects (mentally unstable or not) who physically resisted officers, possessed a weapon, and displayed a hostile demeanor were significantly more likely to receive force compared to suspects who did not have these characteristics. Fourth, mentally unstable suspects were significantly more likely to physically resist, assault officers, and possess a weapon than suspects not labeled mentally unstable. Each of these findings will be discussed in more detail below.

Overall, mentally unstable suspects were found to be significantly less likely to receive any force from officers when compared to mentally stable suspects. This finding suggests

that the police, in general, do not use force as a way to punish the mentally disordered for "causing trouble" or as a form of operant conditioning to deter them from causing further trouble. This finding supported Van Maanen's (1978) assertion that if officers believe that a troublesome person has little control over his or her behavior, they are less likely to find the person culpable for his or her actions, moving the officers to leniency. If, on the other hand, officers believed that a troublesome individual knows what he or she is doing and has control over this behavior, officers will tend to feel justified in punishing him or her through an official coercive action or some form of street justice.

In the use of serious force (which was very infrequent), mentally unstable suspects were significantly more likely than other suspects to receive serious force from the police. Nevertheless, when other legal factors known to affect officer use of force were simultaneously controlled in the multivariate statistical models, there was no longer any evidence that mentally unstable suspects were treated differently simply because of their classification as mentally unstable. This finding was consistent with previous studies regarding arrest (Engel & Silver, 2001; Novak & Engel, 2005) and use of force (Terrill & Mastrofski, 2002) against mentally disordered individuals. The evidence appears to be mounting that police officers generally either show lenience to those they perceive as mentally ill, or at least they are not negatively influenced by the person's perceived mental health status. After important correlates were controlled, the present study found no evidence to suggest that mentally disordered individuals receive harsher treatment at the hands of officers than do nondisordered persons.

The findings of the present study were also consistent with the previous empirical literature on the correlates of police use of force. The law permits police officers to use all reasonable and necessary force to defend themselves, to defend another person, and to apprehend a criminal suspect. Therefore, one would expect police use of force to be influenced most by the violence threat and level of resistance they encounter. This has indeed been the case in the prior research on use of force, and it was also the case in the present study. Regardless of mental stability level, suspects who physically resisted officers, possessed a weapon, and displayed a hostile demeanor were significantly more likely to receive force compared to suspects who did not behave in this manner.

Unfortunately, some of those who suffer from mental disorders appear to disproportionately engage in these dangerous, antisocial behaviors as features of their mental illness, especially when off their medication regimen. Novak and Engel (2005) found evidence that mentally disordered persons encountered by the police were generally more hostile than nondisordered persons. The present study found that suspects perceived as mentally unstable were significantly more likely to resist officers, assault officers, and wield a weapon. The prior research on mental illness indicated that some specific disorders carry a higher risk of hostile and violent behavior (Link et al., 1992; Swanson et al., 1996). When treatment and medication regimens are not followed, mentally disordered individuals' management of their behaviors can be significantly diminished, resulting in antisocial behaviors they can do little to control (Swanson et al., 1997; Swartz et al., 1998b). Finally, when experiencing stressful life events, such as a confrontational situation with the police, persons with some mental disorders experience much stronger negative emotions than those experienced by nondisordered individuals, increasing the difficulty of restraining one's fear or anger (McNiel & Binder, 2005; Silver & Teasdale, 2005).

Although the violent behaviors displayed by mentally disordered individuals pose just as serious a risk to police officers and the public as violence committed by nondisordered

individuals, mentally disordered individuals appear to have less control over their behavior and therefore less mental culpability. This underscores the importance of the availability of community mental health resources to assist law enforcement officers in the field. Some research has suggested that on average, police officers encounter people suffering from a mental illness in approximately 1 out of every 27 contacts with the public (Engel & Silver, 2001). Unfortunately, most police officers believe that they are inadequately trained to identify and intervene in cases of mental illness (Finn & Sullivan, 1987; Wells & Schafer, 2006). In the past decade, this has resulted in an increase in police training to deal with mentally disordered individuals (Wells & Schafer, 2006), the development of specialized units or teams of officers intended to deal with mentally disordered people in crisis (Frank, Eck, & Ratansi, 2004; Vickers, 2000), and improved access to community mental health resources (Lamb & Weinberger, 2008).

Several law enforcement agencies have developed teams of specially trained officers, often paired up with mental health professionals, which respond to calls involving mentally disordered persons experiencing crises. Often referred to as crisis intervention teams (CITs), these teams assist or relieve patrol officers handling calls with suspected mentally disordered persons by trying to identify the psychiatric issues involved, helping deescalate the situation, and assisting the situation by getting proper medical or psychiatric treatment (Frank et al., 2004; Vickers, 2000). The ability of these teams to deescalate potentially violent situations may help further reduce the application of force against the mentally ill. Access to community mental health services has increased since the deinstitutionalization movement of the 1970s; however, the cost and continued limited availability still leaves many mentally disordered in need (Lamb & Weinberger, 2008; McKay, Stoewe, McCadam, & Gonzales, 1998). Better access to community mental health services may also assist in reducing use-of-force incidents against mentally disordered persons.

Like all studies, this one had its limitations. First, even if the POEPWR form was not intended as a tool to collect data on officer use of force, police officers are human and prone to biases. The respondents may have at times had inaccurate recollections of the highly charged events they had experienced. They may also have given in to the natural human tendency to perceive their own actions as good and altruistic, even if others would clearly have interpreted their behaviors differently. Nevertheless, a review of 38 empirical use-of-force studies failed to find a relationship between the method of data collection used and the rates and correlates of police use of force (Hickman et al., 2008). Studies relying on data from official police reports, household surveys, surveys of arrestees, and observational data consistently revealed similar individual, officer, and situational correlates of use of force.

Second, other data limitations included an inability to differentiate between cases from the Eugene Police Department and the Springfield Police Department as the data were pooled, an inability to identify individual officers in the sample, no measure of race, and no geographic measures that would have permitted neighborhood-level analyses. The purpose of the present study, however, was not to identify agency or neighborhood characteristics that contributed to use of force against mentally disordered suspects. Moreover, no evidence suggested that race would be correlated with mental disorder. Therefore, the lack of race was not expected to confound the analysis of correlates of use of force against mentally disordered persons. Third, the data dealt only with officer interactions with criminal suspects. It is unknown what force was used in interactions with individuals who were not criminal suspects, especially mentally disordered persons not classified as a suspect.

Future research in this area should be conducted using systematic social observation data collection methods where trained observers collect data while observing officers perform their jobs. As the present study used data from only two medium-sized cities in the Pacific Northwest, future research should involve a national sample of law enforcement agencies, from various sizes of communities, to control for geographical, cultural, and organizational differences in police and citizen behavior. The present study was unable to control for the degree of access to community mental health resources in the area. Future studies should measure, and control for, the availability of counseling services and hospitalization options available to mentally disordered persons, as well as measure the influence of intervention by CITs.

Evidence exists to suggest that police use of force is influenced to some degree by neighborhood-level characteristics (Terrill & Reisig, 2003), with use of force by the police occurring at higher rates in areas of concentrated disadvantage. Future research should control for these neighborhood influences and investigate the possibility of neighborhood differences in all forms of police dealings with mentally disordered individuals. Last, because the bulk of the previous research has relied solely on the officers' or research observers' perceptions of mental illness, future research should attempt to also include official diagnoses of mental illness among those observed. It is possible that some of the individuals labeled as mentally disordered by officers do not have an official personality disorder diagnosis and vice versa. More effort should be made to determine the accuracy of police officers' (and research observers') mental disorder labeling.

To conclude, this study addressed whether the mental status of a suspect or the suspect's behavior was responsible for guiding police officer behavior regarding the use of force. The results suggested that the behavior of the individual, not being mentally disordered, was the greatest contributor to officer use of force. Police officers appear to primarily consider the danger posed by the suspect through his or her aggressive actions, not whether the person has a mental disorder. Although it appears that serious force is used disproportionately against the mentally disordered, this was explained by disproportionate involvement in violent and aggressive behavior by these mentally disordered individuals.

NOTE

1. Data were obtained from G. P. Alpert and R. G. Dunham, *Police Use of Force in Metro-Dade, Florida, and Eugene and Springfield, Oregon, 1993-1995*, ICPSR No. 3152 (Ann Arbor, MI: Inter-University Consortium for Political and Social Research, 2000).

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