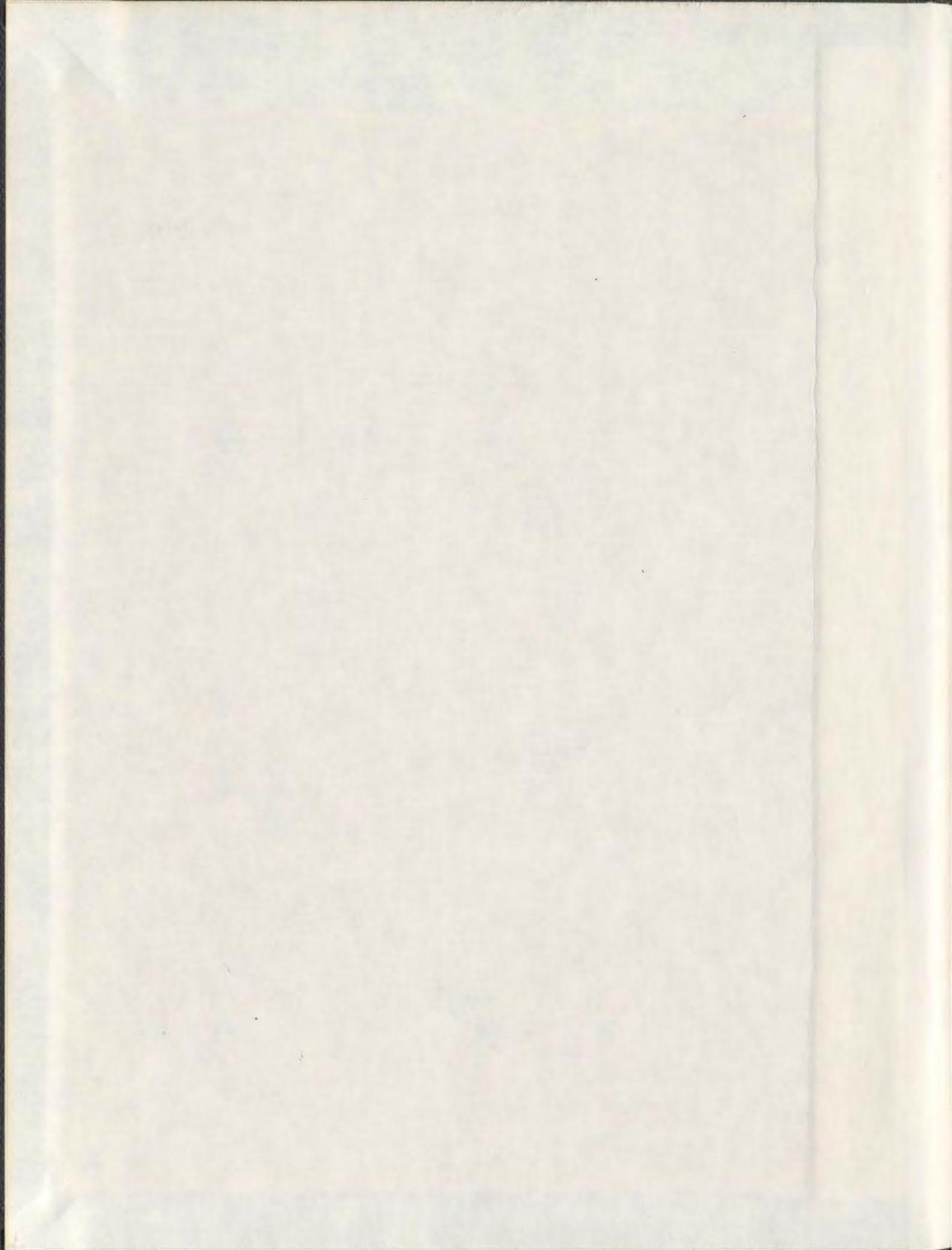


THE EFFECT OF THE MENTAL ILLNESS LABEL
AND CHARACTERISTICS OF PERSONS WITH MENTAL
ILLNESS ON POLICE OFFICER ATTITUDES AND
BEHAVIORAL RESPONSES

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The Effect of the Mental Illness Label and Characteristics of Persons with Mental Illness
on Police Officer Attitudes and Behavioral Responses

by

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A thesis submitted to the
School of Graduate Studies
in partial fulfillment of the requirements for the degree of
Doctor of Psychology

Department of Psychology
Memorial University of Newfoundland

June 2013

St. John's

Newfoundland

Abstract

The effect of the mental illness label and characteristics of persons with mental illness on police officers' attitudes and behavioral responses was examined. Specifically, officers ($N = 112$) from a Canadian police organization were presented randomly with one of eight hypothetical vignettes describing a male or female, suspect or victim, who was labeled as having a mental illness or for whom no information about mental health was provided. Participants completed self-report questionnaires assessing their attributions toward the individual in the vignette and how they would respond in such situations. Differences in officers' attitudes toward men and women were found on the help and pity subscales of the Attribution Questionnaire (AQ); different attitudes toward victims and suspects were obtained on the AQ danger, avoidance, credibility, and responsibility subscales; and, most notably, differences in attitudes toward an individual labeled with schizophrenia were found on all but the help subscale of the AQ. The latter finding, consistent with both attribution and labeling theories, reflected stereotypes and negative perceptions identified previously within the literature to be held by the general population. Results on the Predicated Behavioral Response Survey (PBRs) indicated that officers were significantly less likely to take action in a situation involving a victim with schizophrenia and more likely to take a report/file a complaint for a victim without a mental illness. Officers were also significantly more likely to arrest a suspect with schizophrenia. Gender of the victim or suspect had an inconsequential effect on behavioral responses. The implications of these findings for police training programs addressing mental health issues are discussed.

Acknowledgements

I would like to begin by giving a heartfelt thank you to my supervisor, Dr. Brent Snook, for his unlimited guidance and support throughout my doctorate as well as my bachelor's degree. He has provided me with ample opportunities to learn and grow and it has been a great pleasure to work with him. I would also like to take this opportunity to express my gratitude to the members of the BRL Lab and to acknowledge the financial assistance provided by the Social Sciences and Humanities Research Council of Canada.

To my family, I wish to extend my sincerest thanks and love. Without the support and encouragement of my parents, coupled with their unwavering confidence in my abilities, I would have never started this process. To my brother, Stephen, thank you for being you, always there to provide a balanced perspective and make me smile and laugh, no matter what the situation or circumstance. And to my partner, Chad, I will be forever grateful for your enduring patience and love throughout this process. You inspired me to continue working when I needed it, but also reminded me that there is certainly more to life than work. I have grown considerably over the past three years and the healthy balance that exists in my life now is because of you.

I would also like to send a special thank you to my PsyD cohort: Sarah Chaulk, Pam Button, Lisa Moores, Krystle O'Leary, and Heather Patterson. My time in the PsyD program has certainly been memorable and I am very lucky to have spent it with such an extraordinary group. We have faced many challenges but we have also enjoyed many successes. I wish nothing but the best for you all as we close this chapter and move on to the next.

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The Effect of the Mental Illness Label and Characteristics of Persons with Mental Illness
on Police Officer Attitudes and Behavioral Responses

The frequency of contact between persons with mental illness (PMI) and law enforcement agencies is believed to have increased significantly over the past 40 years (e.g., Godfredson, Thomas, Ogloff, & Luebbers, 2011). Many argue that a host of changes in the legal and mental health systems, ranging from the deinstitutionalization of PMI to stricter criteria for committal to a paucity of community services for PMI have contributed to the increase (Belcher, 1988; Jemelka, Trupin, & Chiles, 1989; Lamb & Weinberger, 1998; Lamb, Weinberger, & Gross, 1999; Steadman, Morris, & Dennis, 1995). The high degree of contact between police officers and PMI is also evidenced by the high prevalence of psychiatric symptoms among detainees in police custody (Ogloff, Warren, Tye, Blaher, & Thomas, 2011) and, concomitantly, an increased rate of major mental illnesses found in prison populations as compared to community samples (Fazel & Danesh, 2002; Ogloff, 2002). As a result, the central roles of officers have expanded beyond the traditional core functions such as arresting criminals and responding to accidents.

According to Sellers and colleagues (2005), police agencies have become the primary mental health resource to citizens in acute distress in the community. This sentiment is echoed by others who have described police officers as *streetcorner psychiatrists* (Teplin, 1984), *amateur social workers* (Cumming, Cumming, & Edell, 1965), *de facto mental health providers* (Patch & Arrigo, 1999) and “*the frontline extension of the mental health system*” (Chief Coroner of Ontario, 1994). How officers

navigate this role, use discretion, and make decisions when dealing with PMI can have important implications for PMI, the police, and the public. These considerations provided the impetus for the current study.

Nature and Frequency of Interactions Between Police and PMI

According to Cotton and Coleman (2008), data regarding the frequency of interactions between police and PMI¹ are often difficult to obtain given the manner in which police organizations keep their records. Moreover, it seems likely that because most data collected does not include informal contacts and/or positive interactions between police and PMI, the frequency is much higher than reported (Cotton & Coleman, 2010). Also worth noting is that studies addressing this issue have lacked both methodological consistency and rigor and, not surprisingly, have generated different conclusions. Notwithstanding those caveats, the estimations derived from previous research are concerning and noteworthy.

In the United States, studies have indicated that approximately 3% to 6% percent of individuals considered suspects by police have serious mental illness (Engel & Silver, 2001; Teplin & Pruett, 1992). Including contacts with PMI in other roles (e.g., victim or witness), medium and large police departments estimate that 7-10% of their contact with the public involves PMI, with 60% of officers responding at least once a month to a mental health related incident (e.g., Borum, Deane, Steadman, & Morrissey, 1998; Deane, Steadman, Borum, Veysey, & Morrissey, 1999; Swanson et al., 2001). Other data

¹ As defined by Cotton and Coleman (2006), PMI is a general term used to denote anyone whose behavior at the time in question is influenced by the presence of significant mental distress or illness. This term includes individuals experiencing chronic and severe illnesses such as schizophrenia, or individuals in a transitory but temporary period of distress, such as an acute anxiety problem, that is expected to abate.

from the U.S. suggest that up to one-third of all emergency mental health referrals are made by the police (Dossche & Ghani, 1998).

Elsewhere, similar figures have emerged. A survey of 131 police officers in Sydney, Australia revealed that 74% of officers had dealt with at least one individual with a mental illness in the last month and more than 10% of police time was spent dealing with PMI (Fry, O'Riordan, & Geanellos, 2002). A similar study, conducted by Dew and Badger (1999) in New Zealand, surveyed 200 front-line police officers and reported a comparable 8.6% of working time was spent dealing with incidents involving PMI. More recently, a large survey of 3,524 officers in Victoria, Australia found that approximately 20% of people with whom officers work with in any week have mental illness; 48% reported that they had contact with PMI 1-2 times per week, 26% reported 3-5 times, 9% reported 6-10 times, and 3.5% reported 10 or more times a week (Godfredson et al., 2011).

Several studies on prevalence have also emerged from a number of Canadian jurisdictions. A detailed analysis of all police occurrence reports in 2005 in Belleville, Ontario, suggested that apprehensions under the Mental Health Act (i.e., being apprehended by police for transport to hospital if certain criteria are met, including but not limited to observing the individual behaving in a way so as to suggest mental illness) constituted 8% of police interactions with PMI (Belleville Police Service, 2007, as cited in Cotton & Coleman, 2010). This study further revealed that of those who appeared to have mental illness, 6% represented suspects and 4% represented those charged by police, and in one-third of the interactions with PMI, the PMI involved were not suspects,

persons charged, victims, or complainants. A report by Wilson-Bates (2008) for the Vancouver Police Board noted that between 23% and 49% of calls for service involved PMI across the four policing districts in the city of Vancouver (population of the city proper is approximately 650, 000 and 2.3 million in the Vancouver metropolitan area). Using addresses, key search words indicative of mental illness, and cautionary flags or indicators of mental illness on files/cases, Hartford and colleagues (2005) developed an algorithm to identify PMI using the police administrative database in London, Ontario (population of approximately 366, 000). Researchers then identified, among other variables, the mean number of contacts, re-involvements, types of interactions, and charges and dispositions of definite, probable, and possible PMI and non-PMI. It was found that definite and probable PMI groups had 3 times more interactions and the possible PMI group had 2 times more interactions than the general population. The three PMI groups were nearly twice as likely to be re-involved with police as the non-PMI group (79.2% vs. 38.3%) and their re-involvement occurred sooner. In fact, approximately 80% became re-involved within a two year period and half of the re-involvements occurred within 59 days. With respect to charges, Harford and colleagues found that almost twice as many PMI were charged and/or arrested during the study period compared to 31% of the non-PMI group; the majority of PMI were charged with minor offenses such as trespassing or nuisance offenses. Of note, PMI were offenders in violent crimes as often as the non-PMI group. This latter point is consistent with Coleman and Cotton's (2010) assertion that the link between mental illnesses in general and violence is not well supported by evidence. In fact, they concluded that the vast

majority of interactions between the police and PMI do not include violence or the need to use force.

Mental Health-related Training for Police Officers

Just over a decade ago, mental health-related training was far from commonplace in policing organizations. In their survey of 174 departments across the US, Deane and colleagues (1999) found that the majority of officers had little or no training in dealing with PMI and that most police departments did not have specialized mental health officers or teams to respond to such calls. Similarly, in 2001, a Canadian survey (as cited in Cotton, 2004) indicated that only a minority of Canadian police services had formal strategies in place to assist in dealing with PMI and that these programs tended to exist only in large urban centers. There was also little agreement among Canadian officers as to the best method of handling PMI (Trovato, 2000, as cited in Cotton, 2004). Furthermore, around that time a study by Cotton and Zanibbi (2003) found that while 76% of officers surveyed from three policing organizations already had some training about mental illness and most were aware of mental illness symptomatology and strategies that would be useful during encounters with PMI, the level of knowledge of officers was variable and some large gaps were apparent.

Anecdotal reports suggest that there has been a substantial increase in both basic-level and in-service training in recent years. A review of police academies/colleges in Canada found that the content, depth, and breadth of training, time devoted to each topic, and education and background of trainers varied considerably (Cotton & Coleman, 2008). Cotton and Coleman concluded that on average, most new police officers received only

approximately 10 hours of education/training during basic training and some programs failed to address key areas such as the symptoms of mental illness, the major diagnostic categories of mental illness, and the teaching of effective communicative strategies when interacting with an individual experiencing psychosis. Cotton and Coleman further noted that this is likely inadequate with regards to teaching the necessary knowledge and skills, and changing stigmatizing attitudes and personal biases.

Coleman and Cotton (2010) also conducted a comprehensive review of the state of police in-service mental health-related training in a variety of jurisdictions across Canada. Their results revealed that, at present, there is a wide variety of training/educational programs throughout the country and that such variations in quality and availability are somewhat related to the size of the police organization. In many small to medium-sized police agencies there was little to no in-service learning (e.g., short seminar or brief online course) while some larger centers had rather comprehensive programs (e.g., joint ventures between Canadian Mental Health Association, British Columbia division (CMHA-BC) and the Royal Canadian Mounted Police (RCMP) E Division). For some larger police organizations with well-developed programs, only a small fraction of officers/employees received adequate training. It is also noteworthy that these researchers reviewed current practice in the U.S., United Kingdom, and Australia and observed a similar trend; there is considerable variability in the content and duration of existing programs. Overall, there is no commonly accepted curriculum for training and therefore no standardized procedure for handling situations involving PMI. Moreover,

outcome research in regard to training (i.e., the amount, type) and its impact on officers is also lacking.

Police Officer Decision-making Regarding PMI

In the absence of standardized procedures for dealing with PMI and insufficient training in many jurisdictions, police officers have considerable discretion in the exercise of their duties in these situations (e.g., Cohen & Marcos, 1990; Green, 1997; Patch & Arrigo, 1999). Generally, officers have three choices: resolve the situation using informal measures or strategies (e.g., trying to calm the person or taking the person home), arrest the individual, or initiate psychiatric hospitalization. Of course, as Teplin (2000) stipulated, there are situations where the law limits discretionary ability. These include: (a) when PMI are either dangerous to self or others; (b) if PMI are unable to provide for basic physical needs so as to protect him/herself from serious harm; (c) when emergency psychiatric hospitalization is required; and/or (d) when the PMI is alleged to have committed a major crime. For the majority of encounters with PMI, however, police officers must use their own judgment and knowledge in selecting the appropriate disposition.

In the seminal study of police discretion with PMI, Bittner (1967) found that a sample of U.S. officers were more likely to make psychiatric referrals and initiate hospitalization when PMI displayed extreme behaviors or symptoms. They did so reluctantly, however, in the absence of other alternatives, stating that they preferred to handle these situations informally. In 1983, Teplin found that little had changed; U.S. police resolved situations with PMI informally in 72% of the cases, made an arrest in

16% of the cases, and initiated emergency hospitalization in 12% of the cases. Teplin (1984) also found that while officers preferred to handle these encounters informally, for similar offences, PMI had a greater chance of being arrested than individuals without mental illness, particularly if the officers felt the individual was unacceptable to the hospital or other care-taking systems and/or would continue to be a problem.

Interestingly, almost 20 years later Engel and Silver (2001) found the opposite. In their study, using data from 1996-1997, American officers were 2.9 times less likely to arrest subjects who had a mental illness. The researchers identified the following factors that increased the odds of being arrested: being male, under the influence of drugs and alcohol, disrespectful to the officer, noncompliant, known to police, fighting with a citizen or officer, possessing a weapon, or committing a serious offence. One possible explanation for the contradictory findings, as suggested by Watson, Ottati, and colleagues (2004), is that between the late 1970s, when Teplin collected her data, and 1996-1997, police policies and training shifted toward directing individuals with mental illness to mental health services. Additionally, these researchers noted that different criteria for determining whether individuals had mental illnesses may also have contributed to the different findings.

The decisions officers make often have important implications for PMI, police officers, and the community. A report by the Canadian Mental Health Association-British Columbia division (2005) highlighted these issues. The results for PMI can be serious and can include long delays in receiving the necessary diagnosis and treatment, unnecessary trauma, and criminalization of illness-induced behavior. In extreme cases,

risk of injury or death due to crisis escalation and show of force can and has occurred. For example, Robert Dziekanski, an unarmed man who was behaving erratically as a result of an apparent delirium, was tasered by four RCMP officers at a Vancouver International Airport and subsequently died (see Braidwood, 2010). Moreover, in Newfoundland and Labrador, Darryl Power and Norman Reid, both PMI, were shot and killed during confrontations with officers of the Royal Newfoundland Constabulary (RNC) and the RCMP, respectively (see Luther, 2003). Regarding police officers themselves, the impact can be traumatic in the event of injury or death of PMI or colleagues (e.g., the RCMP officer in the Norman Reid case suffered post-traumatic stress disorder after the incident, according to the Luther Inquiry) and/or they may face repercussions for their actions during such incidents (e.g., four RCMP officers were charged with perjury for their testimony at the Braidwood inquiry into the Dziekanski case; their trial is still pending). In addition, some police officers also feel frustration in relation to accessing services for PMI. Finally, the public is impacted such that they experience a loss of police response when hours of police time are spent waiting for PMI to be admitted to hospital. The public also receives reinforcement of the false perception that mental illness is a crime rather than an illness. As a result of such implications, it is important to understand what factors impact officers' responses to and behaviors toward PMI.

Factors that Impact Officer Decision-making Regarding PMI

Labeling Theory. Labeling theory provides a useful framework for considering police responses to PMI. This perspective, first proposed by Scheff (1966), suggests that

the PMI label leads society to treat the labeled individual as deviant, to have feelings of fear and disgust toward the individual, and to distance themselves socially from anyone with the label displaying undesirable behaviors. The label is believed to incite adverse reactions such as discrimination and prejudice from others and, according to Scheff, this facilitates the process of socialization into the role of a mental patient. Scheff controversially asserted that this causes PMI to exhibit further “deviant” behavior, fitting the label, exacerbating the problem, and stabilizing the mental illness. Multiple studies conducted within this era reported results consistent with Scheff’s labeling theory (e.g., Denzin, & Spitzer, 1966; Greenley, 1972; Haney & Michielutte, 1968; Linksy, 1970; Rushing, 1971; Wilde, 1968).

Many critics have argued vigorously against labeling theory. In particular, Gove (1982) claimed that many of the studies taken to support labeling theory were methodologically flawed. Gove downplayed the salience of social factors such as stigma and stereotyping and asserted that developments in psychiatry have shown that mental illnesses originate entirely from medical conditions. Along with others, he stated that the mental illness label itself did not illicit negative societal reactions. Rather, negative societal responses are a result of aberrant or bizarre behavior displayed by PMI (e.g., Gove, 1982; Huffine & Clausen, 1979; Lehman, Joy, Kreisman, & Simmens, 1976).

More recently, in an effort to resolve differences between the extremes of Scheff and Gove, Link and colleagues conducted a series of studies in which they manipulated label and aberrant behavior in a series of vignettes (Link, 1987; Link, Cullen, Frank, & Wozniak, 1987; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999). While results

indicated that aberrant behavior did explain a significant portion of variance, it was also found that participants from the general population were likely to stigmatize a person with a mental illness label even in the absence of aberrant behavior; in fact, perceptions of dangerousness activated by the mental illness label were as important, if not more so, than behavior in determining rejection of PMI. This led to the proposal of a modified labeling theory which claims that psychiatric labels are associated with adverse societal reactions that can lead the public (and PMI) to perceive mental illness negatively. PMI will be impacted through rejection, through a reluctance to seek professional help for fear of stigmatization, and through fear-based exclusion by processes such as the “not in my backyard” response (Link et al., 1999). This, in turn, can exacerbate the course of the individual’s disorder. Because of the frequency of contact between PMI and police officers, the effect of a mental illness label on officers’ attitudes and responses toward PMI is an important consideration.

Attribution Theory. Attribution theory represents another useful framework when examining attributions/attitudes and responses toward PMI. According to Corrigan and colleagues (Corrigan, 2000; Corrigan, Markowitz, et al., 2003), the theory holds that behavior is determined by a cognitive-emotional process: persons make attributions about the cause and controllability of a person’s illness that lead to inferences about responsibility. These inferences lead to emotional reactions such as anger or pity that affect the likelihood of helping or punishing behaviors. For example, if the cause of a negative event or situation is perceived to be within the individual’s control (e.g., mental illness attributed to substance use), they will likely be considered responsible for their

illness. Conversely, if the cause of the situation is perceived as uncontrollable (e.g., mental illness attributed to genetic factors), the person is less likely to be judged responsible. Weiner (1995) contends that thoughts progress from causal attributions to inferences about that person and that attributing a negative responsibility for a negative event can lead to anger because of the belief that the individual could have avoided the situation and punishing behavior. On the other hand, judging an individual as not responsible for their situation may lead to pity and the desire to help.

Substantial support exists for the attribution model applied to various helping behaviors (e.g., Corrigan, Green, et al., 2001; Dooley, 1995; Graham, Weiner, & Zucker, 1997; Menec & Perry, 1998) and stigmatized groups, such as racial minorities (e.g., Kluegel, 1990) and individuals with physical disabilities (e.g., Weiner, Perry, & Magnusson, 1988). With respect to public discrimination toward PMI, Corrigan, Markowitz, and colleagues (2003) found support for attribution theory. Using survey data containing responses to hypothetical vignettes, results indicated that causal attributions affect beliefs about individuals' responsibility for causing their condition, beliefs then turn into affective reactions, resulting in rejecting responses such as avoidance, coercion, segregation, and withholding help. This framework may have important implications for police officers; when presented with a situation such as a crime, they inherently try to determine who/what is responsible and, in doing so, they make attributions about the cause and controllability of the event.

Police Officer Attitudes Toward PMI. The primary concern regarding attitudes toward PMI has been whether or not police officers share the same stereotypes that have

been found in the general public and, ultimately, if such views influence their discretionary responses. Recent surveys of PMI from the U.S. suggest that PMI feel as though they are perceived negatively by officers (e.g., Corrigan, Thompson, et al., 2003). Corrigan and colleagues' survey responses of 1,824 persons with a variety of serious mental illnesses indicated that police officers are a significant source of stigmatization and discrimination. Furthermore, a qualitative study that explored the experiences of PMI in encounters with police found that, in general, participants shared negative perceptions and expectations of the officers (Watson, Angell, Schaefer-Morabito, & Robinson, 2008). More specifically, these researchers reported that the majority of PMI in the study felt vulnerable and fearful, and expected to be harassed, treated unfairly, beaten up, and, in some situations, even killed.

With regard to officer's themselves, several studies have examined their attitudes and beliefs about PMI. Psarra and colleagues (2008), for instance, found that the majority of their sample of Greek officers thought that psychiatric patients are a public nuisance, cause problems to their own families, and are a danger to themselves. Although most officers noted that they would like to receive more information about mental health issues, they also stated, along with officers in New Zealand (Dew & Badger, 1999) and Australia (Fry et al., 2002), that it is not their responsibility to deal with PMI in crisis. In an Israeli sample, officers perceived PMI as being more dangerous than the general population, and a small minority felt that those with psychiatric disorders should be isolated from society (Kimhi et al., 1998). Studies from the U.S. have yielded similar results. For example, Ruiz and Miller (2004) found that police officers often fear PMI,

believing that most are unpredictable and dangerous. Moreover, when compared to mental health professionals, an earlier U.S. study found that police officers were more authoritarian, less benevolent, and more in favor of social restrictiveness (Lester & Pickett, 1978). Despite these attitudes, American officers tend to believe that dealing with PMI is part of their duty (Cooper, McLearn, & Zapf, 2004).

A qualitative study in Scotland by Mclean and Marshall (2010) conducted nine in-depth semi-structured interviews with front-line police officers to assess their perceptions of PMI as well as their perceptions of the mental health system. The researchers found that all officers displayed empathy towards the needs of people with mental health problems and were aware of the effect that police intervention may have upon them. In fact, many believed that the impact of police intervention had the potential to exacerbate the situation and increase risk both to officers and the service user. In addition, the majority of officers reported feelings of anger, frustration, powerlessness, and resignation when they had problems accessing services for vulnerable individuals. Many felt that there are inappropriate responsibilities being placed upon them and that they are dealing with mental health issues far beyond the initial crisis stage. Lastly, the officers thought that they were dealing with the consequences of the failure of mental health services.

To our knowledge, there has only been one published study that has examined the attitudes of Canadian police officers toward PMI. In a survey of 138 officers from three police organizations, Cotton (2004) found that officers generally displayed moderately high levels of benevolence, moderate levels of support for community integration, and lower levels of authoritarianism and socially restrictive attitudes towards PMI.

Furthermore, most officers stated that, as a society, we need to learn to be more tolerant toward PMI. Based on these findings, Cotton suggested that the police may actually be more positive toward PMI than society at large. Conversely, an unpublished study of a large sample of Toronto police officers (Trovato, 2000, as cited in Cotton, 2004) found that officers possessed a relatively socially restricted view of PMI. In addition, while Trovato found that officers ascribed, in theory, to principles of benevolence, their behavior was more consistent with authoritarian views.

Most studies in this area have focused on asking officers to respond to people with mental illness in general. There is evidence to suggest, however, that asking participants to respond to a specific person with a mental illness leads to a more sensitive measure of attitudes that better corresponds with concurrent validators (Corrigan et al., 1999; Corrigan, Watson, Warpinski, & Gracia, 2004). Watson, Corrigan, and colleagues (2004a; 2004b) applied this logic and examined how the activation of the mental illness category in the mind of a police officer influenced their feelings and reactions to a specific citizen with a specific illness (e.g., "Steve" with schizophrenia). When police officers were provided with information that a subject (i.e., "Steve") had a mental illness, they attributed less responsibility to the subject for causing the situation, felt more pity, and indicated that they would be more willing to help. Furthermore, consistent with prevalent stereotypes held by the general population (Corrigan, Markowitz, et al., 2003; Stone & Colella, 1996), officers rated individuals with the mental illness label as more dangerous than individuals who had no such label. The authors also reported that having information that individuals had a mental illness increased officer's willingness to

endorse legally mandated treatment significantly. In terms of responding to these individuals, officers were less willing to investigate and take action on behalf of a victim and witness with a mental illness unless they first verified the account with others. The officers were less likely to act on information from a subject they perceived as dangerous, as lacking in credibility, or as a candidate (in the officers' eyes) for legally mandated treatment.

Police Officer Characteristics. A paucity of research exists on the demographic determinants of attitudes toward PMI and the use of discretion in situations involving PMI (Cooper et al., 2004; Engel & Silver, 2001). With respect to officer attitudes, in an early report Lester and Pickett (1978) showed that the age or length of work experience of their sample of 25 police officers did not correlate with officers attitudinal scores on scales of authoritarianism and social restrictiveness. Along the same lines, years later Cotton (2004) concluded that in a Canadian sample of officers, their attitudes toward PMI appeared to be highly idiosyncratic and not particularly related to demographic or organizational factors. Similarly, Psarra et al. (2008) found that gender, rank, family status, and family psychiatric history did not influence opinions of officers in their sample. In contrast, Bolton (2000) reported that American officers' age, ethnicity, and training were related to officer perceptions of the dangerousness of offenders with mental illness, with younger officers, white officers, and officers with less training related to mental illness perceiving more danger.

With respect to officer behaviors and use of discretion, Green (1997) found that police officers' years of experience was negatively related to the probability of arrest and

positively associated with a disposition of “no action taken.” LaGrange (2003) similarly found that officers with higher education were significantly less likely to arrest PMI than were officers with lower education. Watson, Corrigan, and colleagues (2004b) found that officers’ age was significantly related to responding to a victim with mental illness such that younger officers were more likely to take a report/file a complaint on behalf of the victim. Age and education of officers were not significantly related to officers’ responses to witnesses or suspects. Research in this area is needed to work towards deciphering discrepancies in previous findings and it can have important implications for developing training and educational programs for officers.

PMI Characteristics. As with police officers, the characteristics of PMI may influence officer attitudes and/or their behavioral and discretionary responses towards PMI. According to a report by the Commission for Public Complaints Against the RCMP (2010), in the majority of studies to date, PMI remain relatively undifferentiated. Only a few have distinguished between suspect, victim, and witness (as discussed previously, see Watson, Corrigan, et al., 2004a; 2000b) and even less have considered the age or gender of the PMI.

Certainly, concerning gender, there has been some debate within the literature on whether or not males and females with mental illness in our society are treated differently by the criminal justice system. Most studies have examined gender differences among PMI in terms of type and frequency of contact with the criminal justice system. Findings on violence, offending behavior, and patterns of arrest among women and men with mental illness have been inconsistent (Crocker, Favreau, & Caulet, 2002; Crocker,

Hartford, & Heslop, 2009; Zonana, Bartel, Wells, Buchanan, & Getz, 1990). While it is widely accepted that in the general population males are much more likely than females to be arrested for criminal offences and violent behavior, an increasing number of studies have shown that the gender gap regarding arrest rates for violence and criminality among PMI is less clear. In a large birth cohort study, Hodgins (1992) found that, among persons with a severe mental illness or an intellectual disability, women were five times as likely and men were twice as likely as their counterparts without mental illness to have been charged with an offence by age 30. Other studies have shown that men and women with mental illness are, respectively, up to seven times and 27 times as likely to behave violently as men and women with no mental illness (Hodgins, Mednick, Brennan, Schulsinger, & Engberg, 1996; Stueve & Link, 1997). More recently, Crocker and colleagues (2009) found that among persons without mental illness in contact with the police, men were much more likely than women to be offenders, to have a greater number of offences and reoffend more quickly. Among PMI, however, the gender gap for those measures was significantly smaller.

To our knowledge, no study has yet examined how officer attitudes of men and women with mental illness differ. In addition, what effect different attitudes towards males and females may have on how police use their discretion in the exercise of their duties is unexplored and unknown. Research in this area can have important implications for developing gender-sensitive training and educational programs for officers.

The Current Study

As was previously mentioned, there is currently only one published study of attitudes of Canadian officers toward PMI (Cotton, 2004) and no empirical data of how Canadian officers respond to these individuals on the basis of such attitudes. The current study examined the attitudes of a sample of police officers from a Canadian police organization as well as their predicted behavioral responses toward PMI in certain situations. Specifically, adopting the methodology of Watson, Corrigan, and colleagues (2004a; 2004b), the effect of a mental illness label (i.e., schizophrenia) on officers attitudes and responses was assessed as well as two PMI characteristics; the PMI as a suspect or victim and the gender of the PMI. In addition, the association between officer characteristics (e.g., gender, age, ethnicity, education, rank, policing experience, training, and personal experience with mental health issues) and attitudes and behavioral responses was explored. Officers were also surveyed on their perceptions of their organization's effectiveness in dealing with situations and calls involving PMI and the helpfulness of the mental health system and emergency room.

Taking into account the results of the aforementioned research regarding police attitudes and discretionary responses toward PMI, and attribution and labeling theory, the following was hypothesized:

H1: Officers would perceive individuals with the mental illness label more negatively (e.g., higher mean scores on subscales such as anger, dangerousness, avoidance, coercion and segregation, and lower mean scores on subscales such as

credibility) across PMI characteristics (e.g., suspect/victim and male/female) than individuals without a mental illness label.

H2: Officers would perceive individuals they consider having more control over their circumstance (i.e., suspects and individuals without mental illness) more negatively (e.g., higher scores on subscales such dangerousness and lower scores on subscales such as credibility) than individuals perceived as having less control (e.g., victims and PMI).

H3: Officers would perceive males more negatively (e.g., higher scores on dangerousness) than females, particularly males with mental illness.

H4: Officer demographic variables would not be significantly associated with officer attitudes and predicted behavioral responses.

Method

Sample

Police officers ($N = 112$) were recruited as volunteers during four platoon training days at the training division headquarters of a police organization in Atlantic Canada. The majority of respondents (99.11%) were Caucasian and 70.54% were male. Officers ranged in age from 20 to 56 years with a mean age of 31.81 years ($n = 109$, $SD = 8.61$). The average years of policing experience was 6.89 ($n = 108$, $SD = 8.60$, range: 1 to 33). Officers represented primarily constables (91.96%) and sergeants (7.14%) and staff sergeants (0.89%) to a lesser extent. The majority of officers held a college diploma (50.89%) or a bachelor's degree (41.07%); 3.57% held a high school diploma, 1.79% had a master's degree, and 2.68% identified as having other educational backgrounds. The majority of officers reported that they had received some mental health-related training (91.07%). The average length of such training was 2.47 days ($n = 38$, $SD = 1.52$, range: 1 to 5). This organization's basic training included between 10 to 20 hours of training specifically related to working with PMI, some psychology-related coursework, and suicide intervention training. Their in-service training included three seminars on mental health-related topics.

It is of note that comparisons across the eight conditions ($2 \times 2 \times 2$) did not reveal any significant differences with respect to demographic characteristics. Specifically, a series of one-way analyses of variance (ANOVA) found no specific differences in age, $F(7, 101) = .77$, $p = .62$, or years of service, $F(7, 100) = .89$, $p = .52$, across conditions. A series of Chi-Square tests for independence indicated no across condition significant

differences in gender, $\chi^2 (7, n = 112) = .99, p = 1.0$, ethnicity, $\chi^2 (7, n = 112) = 7.06, p = .42$, education, $\chi^2 (28, n = 112) = 26.67, p = .48$, police rank, $\chi^2 (14, n = 112) = 11.53, p = .64$, mental health training, $\chi^2 (7, n = 112) = 11.86, p = .11$, and personal experience with mental health issues, $\chi^2 (28, n = 112) = 17.28, p = .94$.

Stimuli

Eight vignettes describing situations involving a person with a mental illness were adopted from Watson, Corrigan, and colleagues (2004a; 2004b) and modified to include additional variables of study (e.g., the male name that was used and associated pronouns were replaced with a female name and associated pronouns to examine the effect of gender). Consultation with senior staff of the police organization determined that the situations contained within the vignettes were consistent with those encountered by the organization. The vignettes described a hypothetical subject, Steve/Sarah, in the role of a suspect/victim. Two of the vignettes specifically indicated that Steve had schizophrenia while the other two contained no such information, and two of the vignettes specifically indicated that Sarah had schizophrenia while the other two contained no such information. Schizophrenia was selected as the mental illness label for the following reasons: (a) it is one of the most debilitating mental disorders and is most commonly associated with dangerousness (e.g., Phelan, Link, Stueve, & Pescosolido, 2000); (b) to remain consistent with Watson, Corrigan and colleagues (2004a; 2004b) to yield comparable findings; and (c) to prevent the officers from imposing their own interpretation of the type of mental illness if the generic term 'mental illness' was used. Further, as the impact of the label of schizophrenia on police attitudes and decisions was

under investigation, the vignettes did not include descriptions of symptomatic behavior. Including such descriptions may have led officers who were given the vignettes in which the person described was not labeled as having a mental illness to adopt the label on their own (Watson, Corrigan, et al., 2004a). Additionally, intentionally minor infractions or disturbances were portrayed in the vignettes. According to Watson, Corrigan, and colleagues, presentation of serious violations of the law, injury, or acute symptoms would risk limiting officers' discretion and variation in responses.

Measures

Attribution Questionnaire. The Attribution Questionnaire (AQ) used in the current study had been modified for use with police officers by Watson, Corrigan and colleagues (2004a; 2004b). The original AQ, comprised 27 items rated on a 9-point Likert scale, was devised to test a nine factor path model for explaining the relationship between attitudes, corresponding affect, and resulting decisions related to people with mental illness. Test re-retest and confirmatory factor analysis have demonstrated the reliability and validity of this model (Corrigan, 2004; Corrigan, Markowitz, al., 2003). The modified version presented by Watson, Corrigan, and colleagues consisted of 31-items rated on a 5-point Likert scale ranging from 1 (not at all) to 5 (very much). This version yielded five factors that corresponded with the attribution model. The responsibility factor reflects attributions about the individual's responsibility for his/her situation. The pity and anger factors reflect officers' affective reactions to the individual. The help factor represents officers' willingness to help the individual. The coercion factor represents officers' endorsement of legally mandating that the individual receive mental

health treatment. Items were also added by Watson, Corrigan, and colleagues to measure officers' perceptions of the individual's dangerousness and credibility of his/her account of the situation. These authors reported that Cronbach analyses of the seven subscales showed sufficient internal consistencies of .73 and above. For the current study, the Cronbach analyses also showed sufficient internal consistencies of .87 and above.

Police Behavioral Response Survey. Watson, Corrigan, and colleagues (2004b) devised a brief survey of possible behavioral response options by police, named the Police Behavioral Response Survey (PBRS) in the current study. This survey required that respondents rate on a five-point Likert scale, ranging from 1 (not at all) to 5 (very much), how likely they would choose five to eight behavioral responses (e.g., how likely would you be to take no action in this situation?) following their reading of the aforementioned vignettes.

Patrol Officer Survey. The Patrol Officer Survey (POS) was designed by Borum and colleagues (1998) to explore officers' perceptions about handling incidents involving PMI. The main domains covered on the questionnaire include officer preparation for handling situations involving individuals with mental illness, perception of the magnitude of difficulty that PMI pose for the organization, and perceived effectiveness of organizational specialized responses with regards to four specific objectives: meeting the needs of people with mental illness in crisis, keeping people with mental illness out of jail, minimizing the amount of time officers spend on these types of calls, and maintaining community safety. Perceptions of the local mental health system and emergency room helpfulness were also assessed. Responses to all seven items (ten

questions in total) were obtained using a 5-point Likert scale ranging from 1 (not at all) to 5 (very much). Officers were also asked in an open-ended format to estimate the number of encounters they had with PMI in crisis in the past month at the time of data collection.

Demographic Questionnaire. The demographic questionnaire was comprised of eight questions concerning gender, age, and ethnicity of participants, highest level of education achieved (e.g., high school diploma, college diploma, bachelor's degree, master's degree, or other), length/years of policing experience, and police rank (i.e., Constable, Sergeant, Staff Sergeant, Inspector, or other). See appendices A through D for vignettes and questionnaires.

Procedure

Four platoon training days (i.e., one approximately every two weeks) were attended by the primary investigator over the course of a two month period. Each platoon was addressed as a group in a classroom setting located at the training division headquarters of the police organization. The purpose of the study was explained (i.e., the focus was on police decision-making; mental illness was not specifically mentioned). The consent process was conducted orally to prevent officers from having to sign their names, thus ensuring anonymity. Participants were also provided with a letter reiterating the information read (see Appendix E for oral consent script and Appendix F for information letter). Besides trainees, no other members of the police organization (e.g., trainers, supervisors) were present in the classroom at that time. Officers were assigned randomly to one of the eight vignettes – the two different roles of the subject (suspect or victim) by whether or not he/she was labeled as having schizophrenia (label or no label) by gender

of subject (Steve or Sarah). The officers were given a questionnaire package containing three envelopes denoted 'envelope A', 'envelope B', and 'envelope C.' Envelope A contained their assigned vignette and the PBRs, envelope B contained the AQ, and envelope C contained the POS and the demographic questionnaire. Participants were instructed to read and complete the contents of the envelopes A, B, and C respectively. The measures were assigned in this order to prevent officers' (who received vignettes containing no information regarding mental illness) responses on the PBRs from being influenced or contaminated by questions pertaining to mental illness on the AQ, POS, and demographic questionnaire. Officers were instructed to assume that law and organizational policy allowed them full discretion in handling the situation and that they were to use their best judgment in responding to the situation. When complete, officers were instructed to seal each envelope and return their package. Of note, a filler task (e.g., word puzzle) was contained within each envelope for individuals who chose not to participate. The purpose of this was to ensure that non-participants could not be identified. When all packages were collected, participants were debriefed verbally; the purpose and goals of the current study were explained and participants were thanked for their time and contribution.

Data Conditioning

One hundred and sixteen officers received questionnaire packages. A total of four individuals were not included in the subsequent analysis. Three individuals did not provide a sufficient amount of data for use (i.e., one individual completed only 25% of the PBRs and engaged in the filler task provided, while the remaining two completed the

demographic questionnaire only). Furthermore, when the data were reviewed for inconsistencies, one additional participants' data were omitted as that individual selected multiple response options on 90% of questions from the PBRS and the AQ.

A Missing Value Analysis revealed no pattern in missing responses. There were no missing values from the PBRS or the POS. Any missing data points on the AQ were replaced with the individual's mean score of the corresponding subscale. Missing cases on the AQ represented less than 1% of cases.

Results

Officer Attitudes

Design. A 2 x 2 x 2 between-subjects multivariate analysis of variance (MANOVA) was conducted to assess if there were differences among mental illness label, vignette role, and vignette gender on a linear combination of attributions on the AQ (i.e., anger, danger, coercion, segregation, avoidance, help, pity, credibility, and responsibility). The data were checked to ensure the statistical assumptions associated with conducting a MANOVA were met. The assumption of independence of observations was accounted for by random assignment to the three independent variables. Sample size was deemed to be acceptable as there were more cases in each cell than dependent variables and an equal number of cases within each cell. The assumptions of univariate and multivariate normality were met, both skewness and kurtosis values fell well within acceptable ranges (i.e., ± 2.0), and the maximum value for Mahalanobis distance was less than the critical chi-square value based on the number of dependent variables and an alpha level of .001. This latter point also indicated that there were no substantial outliers in the dataset. Furthermore, scatterplots generated for each pair of variables separated by groups (e.g., label/no label, suspect/victim, male/female) showed no evidence of non-linearity. Moderate correlations between dependent variables reflected no violation of the assumption of multicollinearity. Lastly, Box's M test for quality of variance-covariance matrices was statistically significant at the .001 level, indicating a violation of this assumption; however, Tabachnick and Fidell (2007) purport that Box's M test is

notoriously sensitive and recommend disregarding its outcome when sample sizes are equal as robustness of significance tests are expected.

The following sections describe the multivariate main effects for the independent variables examined (i.e., label, role, and gender). Each multivariate main effect is then followed by a description of the planned subsequent univariate analyses of variance corresponding to each dependent variable/subscale of the AQ (and significant findings are presented in accompanying tables). The results of the PBRS are then presented for the victim vignettes and suspect vignettes (i.e., separately, as questions of behavioral responses toward victims differed from what was asked in relation to suspects). The findings with respect to relationships between officer characteristics, attitudes, and predicted responses follow. Finally, descriptive analyses of questions pertaining to officer perceived effectiveness are outlined.

Multivariate and Univariate Effects. The multivariate result showed a significant main effect for label, Wilks' $\Lambda = .075$, $F(9, 96) = 131.56$, $p < .001$, multivariate $\eta_p^2 = .93^2$, indicating a difference in police officer perceptions between individuals with and without a mental illness label. Subsequent univariate analyses of variance, using Bonferroni criteria to correct for multiple comparisons (i.e., .05 divided by 9, the number of dependent variables), revealed significant main effects for label on all subscales of the AQ except the help factor. When the individual in the vignette was described as having schizophrenia, officers mean scores on the anger, danger, coercion in

² η_p^2 or partial eta squared indicates the proportion of variance of the dependent variable that is explained by the independent variable. According to Cohen (1988), .01 is approximately equal to a small effect, .06 is approximately equal to a medium effect, and .138 is approximately equal to a large effect.

treatment, segregation from community, avoidance, and pity subscales, were significantly higher than when no information regarding a mental illness was included. Officers mean scores on the credibility and responsibility subscales were significantly lower when the individual had a schizophrenia label than when no such label was provided. (Means, standard deviations, and effect sizes for significant univariate effects of label are shown in Table 1).

A significant main effect for vignette role was also found, Wilks' $\Lambda = .43$, $F(9, 96) = 14.05$, $p < .001$, multivariate $\eta_p^2 = .57$, indicating a difference in police officer perceptions of victims and suspects. Subsequent univariate analyses of variance, again using Bonferroni correction, showed significant univariate effects. Specifically, suspects were rated by officers to be more dangerous and more responsible for their actions than victims. Officers' responses also indicated that they were significantly more likely to avoid suspects than victims. Furthermore, victims were perceived as more credible than suspects. (Means, standard deviations, and effect sizes for significant univariate effects of vignette role are presented in Table 2.)

There was also a significant main effect for vignette gender, Wilks' $\Lambda = .81$, $F(9, 96) = 2.57$, $p = .011$, multivariate $\eta_p^2 = .19$, which point to a difference in attitudes toward males and females presented in the vignettes, although the size of the effect is considerably smaller than the two previous main effects. According to subsequent univariate analyses of variance with Bonferroni corrected alpha levels, significant main effects were found on both the help and pity subscales. That is, officers' responses indicated that they were more likely to help and pity a female than a male. (Means,

standard deviations, and effect sizes for significant univariate effects of vignette gender are presented in Table 3.)

Finally, a significant label-by-vignette role interaction effect was found, Wilks' $\Lambda = .77$, $F(9, 96) = 3.26$, $p < .05$, multivariate $\eta_p^2 = .23$. Follow-up univariate analyses of variance showed a significant interaction effect on the avoidance subscale, $F(1, 104) = 17.18$, $p < .001$, $\eta_p^2 = .14$, indicating that officers were more likely to avoid suspects and victims with a mental illness label ($M = 14.75$, $SD = 3.32$) than those without a label ($M = 10.13$, $SD = 3.41$). However, within those without a mental illness label, suspects ($M = 12.54$, $SD = 2.96$) received significantly higher ratings on avoidance than victims ($M = 7.71$, $SD = 1.67$). Additionally, a significant interaction effect was found on the responsibility subscale, $F(1, 104) = 8.64$, $p = .004$, $\eta_p^2 = .08$. Officers rated individuals without a mental illness label to be more responsible for their actions ($M = 9.27$, $SD = 2.08$) than individuals with a mental illness label ($M = 5.54$, $SD = 1.71$), but significantly less so if those individuals were victims (victim/label: $M = 4.96$, $SD = 1.29$; suspect/label: $M = 6.11$, $SD = 1.89$).

Officer Predicted Behavioral Responses

The following analyses represent the results of the PBRS completed by each participant. For each vignette role (i.e., victim and suspect), a series of two-way between-group analyses of variance (ANOVA), using Bonferroni criteria to correct for multiple comparisons, were used to examine differences in means between responses of officers receiving information that the individual in the vignette had schizophrenia and those officers who did not, as well as differences in means between responses of officers whose

vignette involved a male (i.e., Steve) and those whose vignette involved a female (i.e., Sarah).

Victim. Fifty-six officers responded to the vignette describing Steve/Sarah as a victim of harassment by his/her neighbor. Of those, 50% received the description of the individual's mental illness history. Moreover, half of the officers' vignette involved Steve and half involved Sarah. Means, standard deviations, and confidence intervals of officer responses to each item across the vignette condition (i.e., label/no label) are shown in Table 4, while means, standard deviations, and confidence intervals of officer responses to each item across vignette gender (i.e., male/female) are shown in Table 5. Two-way between-group analyses of variance revealed that officers who received information that Steve/Sarah had schizophrenia were significantly more likely to indicate that they would take no action in the situation, $F(1, 52) = 68.59, p < .001, \eta_p^2 = .57$; the main effect for gender on this variable did not reach statistical significance, $F(1, 52) = .24, p = .63, \eta_p^2 = .005$, nor did the interaction between label and gender, $F(1, 52) = .026, p = .87, \eta_p^2 = .001$. Officers were also significantly more likely to tell the victim with the mental illness label that they could not do anything and to call if he/she sees anything else, $F(1, 52) = 50.31, p < .001, \eta_p^2 = .49$. Again, the main effect for gender on this variable, $F(1, 52) = 5.59, p = .02, \eta_p^2 = .01$, and the interaction between label and gender, $F(1, 52) = 1.62, p = .21, \eta_p^2 = .03$, were not significant. Officers indicated that they would be more likely to take a report and file a complaint for the victim when the victim did not have a schizophrenia label, $F(1, 51) = 29.97, p < .001, \eta_p^2 = .35$, but no significant difference was found with regards to gender, $F(1, 52) = 2.23, p = .14, \eta_p^2 = .04$, or the interaction

between label and gender, $F(1, 52) = .018, p = .89, \eta_p^2 = 0.00$. Furthermore, there were no significant mean differences noted for the main effect of label or gender, or the interaction between the two when officers were asked how likely they would be to talk to the neighbor about the victim's accusations (label: $F(1, 52) = .023, p = .88, \eta_p^2 = 0$; gender: $F(1, 52) = .57, p = .45, \eta_p^2 = .01$; label x gender interaction: $F(1, 52) = .023, p = .88, \eta_p^2 = 0$) and when asked how likely they would be to warn the neighbor not to bother the victim (label: $F(1, 52) = .90, p = .35, \eta_p^2 = .02$; gender: $F(1, 52) = .204, p = .16, \eta_p^2 = .04$; label x gender interaction: $F(1, 52) = .23, p = .64, \eta_p^2 = .004$).

Suspect. Fifty-six officers responded to the vignette in which Steve/Sarah was accused of pushing a fellow shelter patron and tearing his/her coat. Of those, 50% received the description of the individual's mental illness history. Moreover, half of the officers' vignette involved Steve and half involved Sarah. Means, standard deviations, and confidence intervals of officer responses to each item across the vignette condition (i.e., label/no label) are shown in Table 6, while means, standard deviations, and confidence intervals of officer responses to each item across vignette gender (i.e., male/female) are shown in Table 7. Two-way between-group analyses of variance revealed that officers who received information that Steve/Sarah had schizophrenia were significantly more likely to indicate that they would take no action in the situation, $F(1, 52) = 60.97, p < .001, \eta_p^2 = .54$; the main effect for gender on this variable did not reach statistical significance, $F(1, 52) = .69, p = .41, \eta_p^2 = .01$, nor did the interaction between label and gender, $F(1, 52) = .69, p = .41, \eta_p^2 = .01$. With regards to how likely the officer's would be to warn the suspect to stay away from the victim, the main effect of

label, $F(1, 52) = 4.36, p = .04, \eta_p^2 = .08$, and gender, $F(1, 52) = .17, p = .68, \eta_p^2 = .003$, and the interaction effect between label and gender, $F(1, 52) = .70, p = .41, \eta_p^2 = .01$, were not statistically significant. Similarly, with regards to how likely the officer's would be to warn the victim to stay away from the suspect, the main effect of label, $F(1, 52) = 1.43, p = .24, \eta_p^2 = .03$, and gender, $F(1, 52) = 1.43, p = .24, \eta_p^2 = .03$, and the interaction effect between label and gender, $F(1, 52) = .03, p = .87, \eta_p^2 = .001$, were not statistically significant. Furthermore, when asked how likely they would be to warn the suspect about physically assaulting others, no significant differences in mean responses were found for the main effects of label, $F(1, 52) = .84, p = .36, \eta_p^2 = .02$, and gender, $F(1, 52) = 5.71, p = .02, \eta_p^2 = .01$, or the interaction, $F(1, 52) = .03, p = .86, \eta_p^2 = .001$. Officers were, however, significantly more likely to advise the suspect with the mental illness label to leave the shelter than the suspect without the mental illness label, $F(1, 52) = 9.74, p = .003, \eta_p^2 = .16$; the main effect for gender on this variable, $F(1, 52) = 2.43, p = .13, \eta_p^2 = .05$, and the interaction between label and gender, $F(1, 52) = .39, p = .54, \eta_p^2 = .01$, were not significant. In addition, officers indicated that they would be significantly more likely to arrest the suspect who had a mental illness label than the suspect for whom no information regarding psychiatric history was provided; again there was no significant effect of gender, $F(1, 52) = 3.74, p = .06, \eta_p^2 = .07$, or an interaction between label and gender, $F(1, 52) = 0, p < .001, \eta_p^2 = 0.001$, on this variable. Officers were more likely to advise the victim to go to the police station and file a complaint to have on record if the suspect did not have a mental illness label than if the suspect was labeled as having schizophrenia, $F(1, 52) = 9.37, p = .003, \eta_p^2 = .15$. The main effect for gender, $F(1, 52)$

= 3.55, $p = .07$, $\eta_p^2 = .06$, and the interaction, $F(1, 52) = 2.00$, $p = .16$, $\eta_p^2 = .04$, did not reach statistical significance. Finally, no significant mean differences were found for the main effect of label or gender, or the interaction between the two when officers were asked how likely they would be to file a complaint themselves about the suspect (label: $F(1, 52) = .87$, $p = .36$, $\eta_p^2 = .02$; gender: $F(1, 52) = .02$, $p = .90$, $\eta_p^2 = 0$; label x gender interaction: $F(1, 52) = 1.43$, $p = .24$, $\eta_p^2 = .03$).

Officer Characteristics

Pearson product moment correlations were used to examine associations between officer demographics, attributions about the individual described in the vignette, and police behavioral responses (combined across mental health label and no label conditions). A Bonferroni correction was implemented to control the Type I error rate associated with conducting numerous correlations ($\alpha = .0002$). No significant correlations were found between officer demographic variables (i.e., age, gender, education, years of police service, police rank, completion of mental health-related training, and personal experience with mental health) and attributions or behavioral responses (all r s < .30). Several significant correlations were obtained, however, between officers' attributions toward the individual in the vignette and officer's noted behavioral responses (see Table 8). Officer's who obtained higher scores on the danger subscale were more likely to take no action in the situation with the victim ($r = .55$), tell the victim to call if he/she saw anything else ($r = .60$), and to take no action in the situation with the suspect ($r = .50$). Similarly, officer's who obtained higher scores on the coercion subscale were more likely to take no action in the situation with the victim ($r = .66$), tell the victim to call if he/she

saw anything else ($r = .66$), take no action in the situation with the suspect ($r = .70$), and, more likely to arrest the suspect ($r = .64$). Officer's who obtained higher scores on the coercion subscale were significantly less likely to file a complaint for the victim ($r = -.52$). There was a significant positive relationship between the segregation subscale and taking no action in the situation involving a suspect ($r = .47$). Higher scores on the avoidance subscale were positively correlated with taking no action in the situation with the victim ($r = .58$) and telling the victim to call if he/she saw anything else ($r = .50$), while higher scores on the credibility subscale were negatively correlated with those variables ($r = -.47$, $r = -.55$, respectively). Higher scores on the credibility subscale were also negatively correlated with arresting the suspect ($r = -.56$). That is, officers who perceived the suspect as credible were less likely to arrest him/her. Finally, there were significant negative relationships found between officer's obtained scores on the responsibility subscale and taking no action in the situation with the victim ($r = -.57$), taking no action in the situation with the suspect ($r = -.57$), and arresting the suspect ($r = -.48$).

Officer Perceptions of Effectiveness

Ninety one percent ($N = 102$) of officers reported that they had received mental health-related police training. When asked about their level of individual preparedness when dealing with PMI in crisis, 57% reported feeling well to very well prepared, 36% reported feeling moderately prepared, and 7% reported feeling only slightly prepared. Similarly, 51% of officers reported that their fellow officers in the organization were well

to very well prepared, 39% were moderately prepared, and 10% were slightly prepared to handle these types of crisis situations.

Officers were also asked to rate their organization's effectiveness in responding to situations involving PMI in crisis. Only 15% of officers reported that their organization is effective to very effective in meeting the needs of people with mental illness in crisis; 32% reported feeling that the organization was moderately effective and 53% reported that the organization was not at all to slightly effective in this regard. When asked about perceptions of the organization's effectiveness in keeping people with mental illness out of jail, only 4% of officers reported that the organization was effective; 46% of officers said the organization was moderately effective and approximately 50% reported that the organization was not at all to slightly effective. Officers were less likely to perceive their organization as being effective in minimizing the amount of time patrol officers spent on these types of calls. That is, approximately 97% of officers reported the organization was not at all to slightly effective while only 3% rated the organization as being moderately effective in accomplishing this objective. For maintaining community safety, 62% reported that the organization was effective to very effective, 34% reported that the organization was moderately effective while only 4% reported feeling that the organization was slightly effective. Finally, 91% of officers reported that PMI pose a higher to much higher problem, relative to other problems the organization faces, while approximately 9% rated this issue at about the same or slightly lower than other problems.

Officer perceptions of how helpful the mental health system and emergency room are in providing assistance to them were also investigated since officers frequently interact with these entities when handling mental disturbance calls (Borum et al., 1999). The majority of officers (68%) reported that the mental health system is not at all to slightly helpful while 31% viewed it as being moderately helpful. Concerning emergency room effectiveness, again the majority of officers (83%) rated it as being not at all to slightly helpful and 13% rated it as moderately helpful. Only 5% of officers rated the emergency room as being helpful to them when handling situations involving PMI.

Discussion

The current study examined how information regarding the mental illness of a person of police attention influences the attributions and behavioral responses of a sample of Canadian police officers, and the effect of officer and PMI characteristics upon those attitudes and reactions. In addition, officers' perceptions of their organization's effectiveness in handling incidents involving PMI, and the helpfulness of the mental health system and hospital emergency department were investigated. It was found that the effect of officer characteristics was minimal. Consistent with hypothesis one, results showed that officers' attitudes and reported behavioral responses differed significantly and reflected negative views when the person in question had a mental illness label than when no information regarding psychiatric history was provided. On the one hand, the observation of these differences is paradoxical given the extensive amount of research devoted to identifying and reducing stigma associated with mental illness (e.g., Corrigan, 2004; Corrigan, River, et al., 2001; Corrigan et al., 2002; Corrigan & Watson, 2002; Penn & Couture, 2002, Rüsçh, Angermeyer, & Corrigan, 2005; Warner, 2008). On the other hand, these findings are somewhat predictable because of literature stemming from other countries that highlight prevalent stereotypical attitudes of officers toward PMI (e.g., Kimhi et al., 1998; Lester & Pickett, 1978; Psarra et al., 2008; Ruiz & Miller, 2004; Siltan, Flannelly, Milstein, & Vaaler, 2010; Watson, Corrigan et al., 2004a), and because of inconsistent and perhaps inadequate mental health training afforded to Canadian police officers (Coleman & Cotton, 2010). Furthermore, the majority of officers surveyed reported feeling that their organization was "not at all" to "slightly" effective in meeting

the needs of people with mental illness in crisis and that the mental health system and emergency room is “not at all” to “slightly” helpful in providing assistance to them when dealing with mental illness-related calls. These results suggest two possible interpretations. If officer perceptions (i.e., low levels of trust and confidence in the system) are incongruent with reality (i.e., an effective system) this may be problematic, as officers may be less likely to seek cooperation with mental health services for citizens with mental illness. In this instance, education for officers regarding available mental health services and the protocols and procedures for consultation and collaboration with health care professionals may need to be developed and/or improved. If, on the other hand, officer ratings reflect the reality that mental health services are indeed ineffective, then this points to a much larger systemic problem that is disconcerting and requires the attention of administrators and government officials responsible for health care. This latter explanation seems probable given the reported perceptions of individuals seeking access to the mental health system (e.g., Marcus, Westra, Eastwood, & Barnes, 2012) as well as perceptions of those working within the system (e.g., Lunskey, Gracey, & Gelfand, 2008). It is noteworthy that this low opinion of the health care system and apparent frustration may account for some of officers’ elevated feelings of anger towards PMI.

The Effect of the Label

Consistent with Watson, Corrigan and colleagues’ research (2004a), and attribution and labeling theory (as well as hypothesis two), police officers in the current study viewed persons with schizophrenia as being less responsible for their situation and more deserving of pity than a person without a mental illness label. In contrast to Watson,

Corrigan and colleagues, officers did not view the individual with schizophrenia as being more worthy of help and they expressed more anger toward this person than the individual not labeled with schizophrenia. Officers also rated individuals with the schizophrenia label as significantly less credible than his/her non-labeled counterpart, reflecting results consistent with Finn and Stalans (2002) and Watson, Corrigan and colleagues (2004a). While it is true that schizophrenia may cause confusion and/or impact an individual's ability to perceive a situation, this is not always the case. Discounting reports provided by persons with schizophrenia may lead to the loss of pertinent information needed to resolve complaints of wrongdoing and a failure to help individuals who are particularly vulnerable to victimization (Marley & Bulia, 2001). One suggestion is for officers to substantiate questionable information when possible through other sources before dismissing complaints from these individuals, with the goal of providing equitable treatment and assistance to persons with schizophrenia (and other mental illnesses) and ultimately promoting the positive inclusion of these persons in the activity of doing justice in society.

It was also found that police officers viewed persons with the schizophrenia label as being significantly more dangerous than a person for whom no psychiatric history was provided. These results are consistent with previous findings of prevalent stereotypes among the general public (Arboleda-Florenz, 2003; Finn & Stalans, 1997; Link et al., 1999; Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999; Phelan et al., 2000; Thompson et al., 2002) and in studies examining police officers' perceptions of PMI (Bolton, 2000; Kimhi et al., 1998; Ruiz & Miller, 2004; Watson, Corrigan et al., 2004a).

Watson and colleagues purport that for police officers, incidents that involve PMI behaving violently are more memorable than are ordinary disturbance calls. This is consistent with social and cognitive psychological research supporting the *vividness effect* in human memory where individuals retrieve from memory the information that seems relevant to the situation at hand; thus, they use the information that is more accessible in memory to make decisions or inferences rather than information in memory that is more reliable (Stanovich, 2010). It also seems to be the case that police officers do not tend to get called for incidents in which there is no perceived threat of violence and no public safety issue involved. As a result, there is likely to be a greater representation of these kind of experiences compared to experiences with other members of the public. Watson and colleagues further believe that this heightened sense of dangerousness and risk leads to a more aggressive approach to PMI and this, in turn, may escalate the situation and evoke unnecessary violent behavior. In reality, the vast majority of interactions between the police and individuals with mental illness do not include violence or the need to use force (Coleman & Cotton, 2010). According to the Canadian Mental Health Association (2005), PMI are in fact two and a half times more likely to be *victims* of violence than members of the general public and are no more likely to harm strangers. Regarding schizophrenia in particular, research has indicated a small but significant relation between one of its hallmarks, psychosis, and violent acts (Taylor, 2008). Most violent crimes, however, are not committed by individuals with schizophrenia and, if a person with schizophrenia becomes violent, the violence is usually directed at family members and in the home, rather than at the public at large (Walsh, Buchanan, & Fahy, 2002). Within the

literature, it is widely contended that the risk of violence is mainly confined to small subgroup of PMI who are often not being treated appropriately, not taking his or her medication, and/or who have a co-occurring substance abuse disorder (e.g., Reuland, Schwarzfeld, Draper, 2009). Indeed, factual knowledge about the real relationship between mental illness in general, schizophrenia, and dangerousness is essential when officers have to use their discretion and navigate often delicate situations.

Given these findings regarding perceived dangerousness, the fact that officers indicated that they were more likely to avoid and endorse segregation from the community for persons with a mental illness label than those without a label are not surprising. The perception that individuals with mental illness, schizophrenia in particular, are dangerous has been found to be related to a desire for social distance from these individuals (Angermeyer, Beck, & Matschinger, 2003; Corrigan, Green et al., 2001; Link et al., 1999; Siltan et al., 2010; Trovato, 2000, as cited in Cotton, 2004). These findings are noteworthy as stigmatizing attitudes such as these have been found to negatively impact PMI, leaving them feeling rejected and isolated and suffering with low self-esteem (Stuart, 2006).

Interestingly, these results (i.e., increased avoidance, segregation from community) are inconsistent with those of Cotton (2004), who found that very few of the Canadian officers sampled felt that individuals with mental illness should be isolated from society and most felt that, as a society, we need to learn to be more tolerant toward PMI. This discrepancy may reflect a host of differing factors between the two studies such as sample differences (e.g., cultural, personal experiences, training/resources for

training), geographical variations, and so on. It is also arguable that the observed discrepancy reflects the fact that Cotton asked officers to respond to PMI in general while the current study asked officers to respond to a specific person with a specific mental illness. As was previously mentioned, Corrigan and colleagues contend that there is evidence that the latter leads to a more sensitive measure of attitudes that better correspond with concurrent validators (Corrigan et al., 1999; Corrigan et al., 2004).

Consistent with Watson, Corrigan and colleagues (2004b) finding, officers in the current study indicated that they were less likely to take action and file a complaint on behalf of a victim with a mental illness compared to a victim for whom no mental health information was provided. These results are also similar to those obtained from studies of police responses to victims with mental illness involved in domestic disputes (Finn & Stalans, 1995; Stalans & Finn, 1995). Failing to investigate claims based on information that a person has a mental illness serves to reinforce the victimization and rejection commonly experienced by these individuals. Again, it is possible that discounting such reports may lead to the loss of pertinent information and may result in the failure to apprehend an offender. In addition, officers were more likely to advise a person with mental illness to call the police again if he/she sees anything else suspicious. Watson and colleagues concern that it is crucial to dispatch information quickly and any delay in doing so may impede the course of the investigation is echoed here.

Somewhat contradictory findings emerged when officers were questioned about their responses to suspects with and without the mental illness label. On the one hand, officers indicated that they were more likely to take no action to investigate the crime and

less likely to tell the shelter patron (victim of the alleged crime) to file a complaint when the suspect had the schizophrenia label. On the other hand, officers were more likely to tell the suspect to leave the shelter and more likely to endorse arresting the suspect with the mental illness label; the latter finding is consistent with the research of Teplin and Pruett (1992) and Crocker et al. (2009). One explanation for this result may be that police engage in a practice referred to by Lamb and Weinberger (1998) as “mercy booking”. That is, officers may be more inclined to take PMI to jail if they believe no appropriate alternatives are available in the community. This appeared to be the case with officer’s in Mclean and Marshall (2010)’s sample who emphasized that they did not want to arrest individuals unnecessarily, but stated that gaps in services or failures in collaborative working resulted in inappropriate detention to police cells. With the current sample, it seems plausible that the decision to arrest may have been dependent on the systems available to police for dealing with PMI in crisis; the majority of officers rated the local mental health system and emergency room as being minimally effective in helping them resolve such encounters. Another possible explanation for this finding has to do with what information the police received before making their discretionary responses. Participating officers were told that they were familiar with the suspect and that he/she had previous contact with police. Results from a survey of Australian officers suggested that police-based information regarding an individual’s previous misdemeanors and contact with law enforcement may increase the likelihood of criminal apprehension, irrespective of their apparent mental health needs and presentation (Godfredson et al., 2011). Further to that, Engel and Silver (2001) found that after controlling for situational

factors (e.g., victim and suspect known to each other, suspect known to police, police initiated encounter, public location), as well as suspect and legal variables, police were not more likely to arrest suspects experiencing mental illness.

Officer Attitudes Towards Suspects versus Victims

Not surprisingly, and consistent with Watson, Corrigan and colleagues (2004a) (and hypothesis two), suspects were seen as more dangerous, more responsible for his/her actions, and less credible than victims of the crimes described in the current study. As argued by Watson and colleagues, as per the course of a criminal investigation, it is likely that the credibility of an individual suspected of committing a crime is always questioned, particularly more so than a victim. It was also found that officers were more likely to endorse avoiding a suspect than a victim. Again, this is unsurprising given their fears that the individual may be dangerous and may have committed an offense; however, these attitudes could have ramifications with regards to officer reluctance to question and/or interview subjects to help determine guilt or innocence and thus the successful resolution of criminal investigations.

PMI Gender: Is there a Bias?

With regards to gender, it was found that officers exhibited more pity and were more willing to help females rather than males in the vignettes. This is consistent with research that demonstrates that gender stereotypes can lead to evaluative differences of the sexes. Specifically, it has been found that women are perceived more favorably overall than men, and perceived as kinder and warmer than men (e.g., Meltzer & McNulty, 2011). It is noteworthy that no significant effects were found on other subscales

of the AQ. This is inconsistent with hypothesis three and with research that suggests that men are perceived as more dangerous than women (Meltzer & McNulty, 2011).

Furthermore, no significant differences were found with respect to officers' intended behavioral responses to male and female suspects or male and female victims. There does not appear to be any other studies that have examined how officer perceptions of men and women differ and what effect this may have on how police use their discretion in the exercise of their duties; most studies have examined gender differences in terms of type and frequency of contact with the criminal justice system. As such, at present there is no explanation as to why the significant effects found on the help and pity subscales of the AQ did not extend to other variables.

Interrelationships Among Attitudes, Responses, and Officer Characteristics

Officer attributions and perceptions of the individual were related significantly to responses to the victim. Consistent with the attribution model and Watson, Corrigan and colleagues (2004b), officers who perceived the victim as dangerous, responsible for their situation, and lacking in credibility were less likely to take action to assist him/her. Officers with these perceptions were also more likely to tell the victim to call if there was any further problem. Furthermore, officers who indicated that the victim should be legally mandated into treatment and that they would likely avoid the victim were also less likely to take any action to assist him/her and less likely to file a complaint on behalf of the victim. Again, as discussed above, choosing this course of action may have negative consequences for the administration of justice.

The current study also found significant correlations between attributions about the suspect and responses to him/her, in contrast to Watson, Corrigan et al. (2004b). Officers were less likely to take action to assist a suspect who they perceived as dangerous, being more responsible for their situation, lacking in credibility, and who they thought should be legally mandated into treatment and segregated from society. Moreover, officers who felt the suspect should be legally mandated into treatment were more likely to endorse arresting the suspect. This provides additional support for the contention that officers are engaging in mercy bookings in an attempt to find help for these individuals. Alternatively, given that officers perceived the suspect as more dangerous, they may have endorsed an arrest to protect both personal and public safety. Finally, officers were more likely to arrest suspects perceived as less credible and more responsible for the situation in which he/she found him/herself. This is not surprising given the nature of investigations involving an individual suspected of committing a crime.

The effect of officer characteristics such as age, gender, education, years of police service, police rank, completion of mental health-related training, and personal experience with mental health on measured attributions and behavioral responses was negligible. It should be noted that there was somewhat of a restricted range with respect to some of the variables analyzed. For example, with respect to police rank, a large majority of officers were constables and therefore assessing the impact of other police ranks was limited. These results are consistent, however, with the recent studies of Cotton (2004) and Psarra et al. (2008) and with the fourth hypothesis of the current study. These

findings suggest that training on best practices and models for handling encounters with PMI may be equally beneficial for all officers.

Officer Perceived Ineffectiveness

Although the majority of officers reported feeling that they themselves were prepared and their colleagues were prepared to handle situations involving PMI in crisis, only 15% of officers reported that their organization was effective in meeting the needs of these individuals. Half of the officers reported that their organization was minimally effective in keeping people with mental illness out of jail and nearly 97% of officers rated the organization as being minimally effective in reducing the amount of time officers spend on these types of calls. This is consistent with the findings of Borum and colleagues (1998) who found that police encounters with PMI were perceived to present a significant operational problem for the organization. With 91% of officers in this sample reporting that PMI pose a higher problem relative to other problems the organization faces, it is becoming increasingly important for law enforcement agencies to train and educate their officers in effective strategies for dealing with these types of calls. Moreover, Coleman and Cotton (2010) contend that it is essential that police organizations have policies and procedures in place that support the application of skills and knowledge that police obtain through such training and education.

It was also found that the majority of officers rated the mental health system and emergency room as being not at all to only slightly effective (i.e., 68% and 83%, respectively) in assisting them in handling situations involving PMI. These findings are comparable to those of Mclean and Marshall (2010) in which officers perceived minimal

support from health professionals and, as described above, reported that gaps in services and failures in collaborative working with the mental health system was a primary reason for inappropriate detention in police cells. Likewise, Godfredson et al. (2011) and Fry et al. (2002) reported that officers in their samples felt unsupported and frustrated with mental health agencies. Collectively, these findings underscore the importance of collaborative working between police and mental health professionals and agencies. Both sides must recognize that the roles of police officers have moved beyond traditionally defined and envisaged police functions, and acknowledge that their responsibilities significantly overlap with regards to supporting vulnerable members of the community.

Limitations of Current Study

Several caveats do apply to interpretations of the findings discussed above. Firstly, there are inherent limitations of vignette-based research. These include: the need to make characters, events, and situations seem real and relevant in order to minimize an atmosphere of make-believe (Finch, 1987); their restricted ability to capture the complex factors that influence attitudes (Simonds & Thorpe, 2003); and, using hypothetical situations designed to elicit responses raises questions regarding how far one can generalize about normative beliefs or draw conclusions about respondents' own behavior from this type of data (Eskelinen & Caswell, 2006; Hughes, 1998). Gould (1996) suggested a methodology for vignette development to counteract the above and help establish vignette internal validity. Specifically, he recommended developing vignettes using existing literature, submitting them to a panel of experts for review, and pretesting to remove ambiguity. This approach appears to have been followed by Watson, Corrigan,

and colleagues (2004a), who developed 12 vignettes after conducting reviews of vignettes used in officer training manuals and previous studies, and after consultation with police officers from several different policing departments. Officers then rated the vignettes on the basis of believability and the best vignette for each type of situation was selected for their study. Upon adopting these vignettes for use in the current study, consultation with senior officers took place to verify that the scenarios described within them were consistent with those encountered by the organization in which officers would be sampled. Also noteworthy is that research *has* found that people respond to vignettes in much the same way as they would if faced with a real life situation (Hughes, 1998).

Secondly, the current study examined officers' attitudes and predicted behavioral responses toward individuals with schizophrenia specifically. It is possible and probable that officers' perceptions differ with respect to other types of mental illness that they encounter while on the job (e.g., depression, substance abuse/dependence, anxiety). Indeed, this may influence the generalizability of these findings. In addition to the schizophrenia label, participating officers were told that they were familiar with the suspect and that they had previous contact with police. If an individual has been previously apprehended by police, the possibility exists that he or she has been seen as a danger to him/herself or someone else at some point in time. This has the potential to influence officers' perceptions of the individual's level of dangerousness for example and should be taken into consideration when interpreting these findings.

Thirdly, the Police Behavioral Response Survey measured officers' intended behavioral responses, not actual behaviors. Although behavioral intention has been

identified as the primary determinant of behavior, the literature also suggests that factors such as environmental constraints and necessary skills play a significant role in influencing decisions to perform a given behavior, and additional variables (e.g., self-standards, norms, self-efficacy) influence the strength of intention (Fishbein et al., 1992, Fishbein, 2000). Bearing this in mind, responses may not indicate with complete accuracy how respondents will actually behave in real-life situations, therefore their practical relevance may be both unclear and limited (Burns & Rapee, 2006). We encourage future researchers to consider measuring and/or controlling these variables to determine what impact they have on officer intentions. More than that, we also encourage future research to assess actual officer behavior to allow for stronger conclusions regarding police behavior on the job.

Fourthly, officers surveyed in the current study were from a police agency located in a moderately sized metropolitan area in Atlantic Canada. As such, the findings may not be generalizable to officers from larger centers (e.g., those sampled by Watson and colleagues (2004a)) and/or nonmetropolitan or rural regions, whose work context may be significantly different. Generalizability of results may also be limited by differences in mental health-related education/training programs offered by police agencies across Canada. Indeed, Coleman and Cotton (2010) reported wide variations in quality and availability of Canadian police/mental health education programs, ranging from no in-service learning in many small and medium-sized police agencies to relatively comprehensive programs in larger agencies. It was noted, however, that while these larger organizations had well-developed programs, only a small fraction of their personnel

participated in such programs. This suggests probable training deficiencies across the country and certainly a deficiency in standardized protocols and police/mental health education programs throughout the country.

Lastly, this study relied on the use of self-report surveys and questionnaires. As such, officers' responses may reflect some social desirability. It should be noted, however, that attempts were made to control for this by ensuring officer anonymity through the use of oral consent only, by using randomly assigned numbers for identification rather than names, and through the provision of filler tasks to ensure non-participants could not be identified by other participants or by the principal researcher. Moreover, the literature suggests that respondents are less likely to give socially acceptable responses when using vignettes, like the current study, than if asked directly (Alexander & Becker, 1978; Finch, 1987; Ganong & Coleman, 2006; Hughes & Huby, 2004). Finally, one could argue that the effect of social desirability bias was minimal in the current study as officers seemed willing to acknowledge the problems/shortcomings of their organization's abilities.

Implications for Police Education and Training

Despite the aforementioned limitations, the results of the current study provide a significant contribution to the research literature. The data presented provide information regarding police attitudes toward PMI, corresponding affect, and how officers perceive themselves responding in these situations. Moreover, the results underscore the importance of police education and training regarding interactions with PMI, highlight issues that could be addressed through such training, and demonstrate the need for more

outcome research to examine the effects that mental health-related training has on officer attitudes and corresponding behavior.

As discussed previously, perceptions of dangerousness and fear of PMI may influence how officers approach such individuals and may lead to escalation of situations unnecessarily. In addition, perceiving PMI as being less credible as well as endorsing avoiding such persons can have detrimental consequences in that it can lead to further victimization and can disrupt the course of an investigation due to the loss of valuable information. It is likely that these ideas that officers have about PMI are partly due to widespread misconceptions and misinformation within society and the mass media (Dupont & Cochran, 2000). Increasing police knowledge and understanding through educational programs that involve factual information about the characteristics (e.g., actual levels of violence) and treatment of specific mental illnesses could serve to reduce discriminatory attitudes. Indeed, research indicates that such programs can lead to significant decreases in mental illness stigma (Keane, 1991; Morrison & Teta, 1980; Penn et al., 1994). Research with police officers in particular yielded similar conclusions; Pinfold and colleagues (2003) found that experiential mental health awareness training did change participant's reported attitudes towards people with mental health issues and left police officers feeling more informed and more confident in supporting persons with mental distress. With regard to which form of education is effective, programs that directly attack myths, increase empathy through simulations, include personal information about the individual with a mental illness, and include group discussion have been associated with successfully decreasing stereotypes and prejudicial attitudes

(Corrigan & Penn, 1999). Coleman and Cotton (2010) also recommend that mental-illness related curriculum for officers include a variety of forms of learning media, a focus on cognitive determinants of behavior (i.e., attitudes, exercise of discretion and stigma), adaptable material to reflect the population receiving training as well as community needs, the selection of appropriate trainers (e.g., subject matter experts and operationally credible) and the inclusion of local mental health professionals to assist in forming local relationships with mental health agencies.

It is also probable that the ideas that officers have about PMI are at least partially attributable to their previous experiences with individuals with mental illness. According to Psarra and colleagues (2008), police rarely have contact with persons with mental disorders who are insightful into their illness, adhere to treatment, consequently are less aggressive, and seldom involuntarily hospitalized. Addressing officers' perceptions through positive contact with PMI may serve to reduce stigma as well as improve officer comfort in situations involving such individuals. Contact interventions have garnered empirical support, resulting in increases in positive attitudes towards PMI, wider latitudes of acceptance toward the group, and increases in corresponding helping behavior (Corrigan, River, et al., 2001; Corrigan et al., 2002; Desforges et al., 1991). What's more is that when compared, contact was shown to be far superior to education programs in improving stigmatizing attitudes (Corrigan, River et al., 2001; Corrigan et al., 2002).

A final point on the implementation of such interventions is that they may also serve to address concerns officers have with organizational effectiveness. Armed with accurate information and positive contact experiences, the organization as a whole may

be better equipped to more clearly recognize the needs of PMI in crisis. As mentioned above, however, policies and procedures are also needed to support and reinforce the application of skills and knowledge that police officers obtain through such training and education.

Implications for Collaboration with Mental Health Agencies

The results of the current study also highlight a perceived and potentially real disconnect between the police organization and local mental health and emergency services. Overall, officers perceived both types of services as being minimally helpful in assisting them in dealing with PMI in crisis. Cotton and Coleman (2010) contend that significant strides have been made in this regard in Canada over the past 10 years such that many police organizations across the country consider themselves contemporary policing organizations with an 'open' system that relies on consultation, collaboration, and cooperation with community agencies and mental health services. Cotton and Coleman note, however, that the way in which individual police services operationalize working relationships with such agencies varies significantly between regions (e.g., a designated mental health officer, mobile crisis team, crisis intervention team).

Unfortunately, there is little outcome research or data-based evidence to inform the exact nature of an effective program. There are several elements, however, believed to underlie successful approaches and were utilized by the Canadian Association of Chiefs of Police (CACCP) to develop contemporary policing guidelines for working with the mental health system. In brief, the principles of these guidelines include: designating specific police personnel responsible for issues related to people in the community with

mental illness; establishing a formal liaison with the local mental health system and emergency services department; providing appropriate training for all officers, those working in victim services, and those answering calls and dispatching officers; providing clearly defined policies and procedures for access to mental health expertise on a case-by-case basis; ensuring the organization has contact information (i.e., directory or other print material) for mental health agencies in the area for officers, other staff, PMI, and their families; and, developing a data collection system that reflects the nature, quantity, and outcome of interactions with PMI (for the guidelines and principles in their entirety, see Cotton & Coleman, 2006).

There is no debating that police organizations and their officers will continue to come in contact with PMI in the community. The results of the current study showed that stereotypical attitudes and misinformation about mental illness are still held by officers from at least one police organization in Canada. In addition, such attitudes may negatively impact interactions between police and PMI which can, in turn, prevent the positive inclusion of PMI in the activity of doing justice in society and/or impede criminal investigations. Assuming that these findings generalize to some extent to other police organizations in Canada, and it is suspected that they do because of training inconsistencies and deficiencies across the country, these results highlight not only the need to educate and train Canadian officers on mental illness and support the application of this knowledge, but also the importance of systematically evaluating and documenting the outcomes of such training.

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Table 1

Significant Univariate Effects for Vignette Label (Bonferroni adjusted $\alpha = .006$)

Dependent Variable	<i>F</i>	Vignette Condition	<i>M</i>	<i>SD</i>	95% <i>CI</i>	Partial η^2
Anger	9.26	Label	5.05	1.96	[4.60, 5.51]	.08
		No Label	4.05	1.55	[3.60, 4.50]	
Danger	149.50	Label	13.43	2.99	[12.80, 14.06]	.59
		No Label	7.91	2.19	[7.28, 8.54]	
Coercion	839.89	Label	10.39	1.78	[10.05, 10.73]	.89
		No Label	3.34	.51	[3.00, 3.68]	
Segregation	51.75	Label	6.0	2.41	[5.53, 6.47]	.33
		No Label	3.57	.93	[3.10, 4.05]	
Avoidance	71.44	Label	14.75	3.32	[13.98, 15.52]	.41
		No Label	10.13	3.40	[9.36, 10.89]	
Pity	15.79	Label	11.55	3.14	[10.74, 12.37]	.13
		No Label	9.25	3.44	[8.44, 10.06]	
Credibility	90.91	Label	7.30	1.83	[6.89, 7.72]	.47
		No Label	10.13	1.96	[9.71, 10.54]	
Responsibility	157.26	Label	5.54	1.71	[5.12, 5.95]	.60
		No Label	9.27	2.08	[8.85, 9.69]	

Note. Higher scores indicate greater endorsement of the attribution.

Table 2

Significant Univariate Effects for Vignette Role (Bonferroni adjusted $\alpha = .006$)

Dependent Variable	<i>F</i>	Vignette Role	<i>M</i>	<i>SD</i>	95% <i>CI</i>	<i>Partial η^2</i>
Danger	27.70	Victim	9.48	3.82	[8.85, 10.12]	.21
		Suspect	11.86	3.43	[11.22, 12.49]	
Avoidance	21.78	Victim	11.16	4.29	[10.39, 11.93]	.17
		Suspect	13.71	3.43	[12.95, 14.48]	
Credibility	54.20	Victim	9.80	2.18	[9.39, 10.22]	.34
		Suspect	7.63	2.02	[7.21, 8.04]	
Responsibility	45.97	Victim	6.39	2.13	[5.98, 6.81]	.31
		Suspect	8.41	2.78	[7.99, 8.83]	

Note. Higher scores indicate greater endorsement of the attribution.

Table 3

Significant Univariate Effects for Vignette Gender (Bonferroni adjusted $\alpha = .006$)

Dependent Variable	<i>F</i>	Vignette Gender	<i>M</i>	<i>SD</i>	95% <i>CI</i>	<i>Partial η^2</i>
Help	8.23	Male	10.73	2.04	[10.15, 11.32]	.073
		Female	11.93	2.40	[11.34, 12.51]	
Pity	10.07	Male	9.48	3.25	[8.67, 10.30]	.088
		Female	11.32	3.48	[10.51, 12.13]	

Note. Higher scores indicate greater endorsement of the attribution.

Table 4

Means, Standard Deviations, and Confidence Intervals for Police Officer Behavioral Responses given information about the Victim's Mental Illness History versus Responses from Officers who did not receive such information

Behavioral Response	Vignette Condition	<i>M</i>	<i>SD</i>	95% <i>CI</i>
No action*	Label	3.46	.79	[3.15, 3.78]
	No label	1.64	.83	[1.33, 1.96]
Tell victim to call if he/she sees anything else*	Label	3.32	.72	[3.04, 3.60]
	No label	1.93	.81	[1.65, 2.21]
Talk to neighbor	Label	4.29	.94	[3.95, 4.63]
	No label	4.25	.80	[3.92, 4.59]
Warn neighbor	Label	3.29	1.01	[2.86, 3.71]
	No label	3.57	1.23	[3.15, 3.99]
Take report/file complaint*	Label	2.61	.99	[2.23, 2.98]
	No label	4.00	.98	[3.63, 4.37]

Note. Responses to the vignette were measured on a five point likert scale: 1 (not at all) to 5 (very much).

* $p < .001$

Table 5

Means, Standard Deviations, and Confidence Intervals for Police Officer Behavioral Responses given information about a Male Victim versus a Female Victim

Behavioral Response	Vignette Gender	<i>M</i>	<i>SD</i>	95% <i>CI</i>
No action	Male	2.61	1.20	[2.30, 2.92]
	Female	2.50	1.26	[2.19, 2.81]
Tell victim to call if he/she sees anything else	Male	2.86	1.01	[2.58, 3.14]
	Female	2.39	1.03	[2.11, 2.67]
Talk to neighbor	Male	4.36	.83	[4.02, 4.69]
	Female	4.18	.91	[3.84, 4.51]
Warn neighbor	Male	3.21	1.13	[2.79, 3.64]
	Female	3.64	1.10	[3.22, 4.07]
Take report/file complaint	Male	3.11	1.23	[2.73, 3.48]
	Female	3.50	1.17	[3.13, 3.87]

Note. Responses to the vignette were measured on a five point likert scale: 1 (not at all) to 5 (very much).

Table 6

Means, Standard Deviations, and Confidence Intervals for Police Officer Behavioral Responses given information about the Suspect's Mental Illness History versus Responses from Officers who did not receive such information

Behavioral Response	Vignette Condition	<i>M</i>	<i>SD</i>	95% <i>CI</i>
No action*	Label	3.32	.95	[3.02, 3.63]
	No Label	1.64	.62	[1.34, 1.95]
Warn suspect to stay away	Label	4.46	.69	[4.22, 4.71]
	No Label	4.11	.57	[3.87, 4.35]
Warn shelter patron to stay away from suspect	Label	4.29	.94	[3.99, 4.58]
	No Label	4.04	.58	[3.74, 4.33]
Warn suspect about physically assaulting others	Label	4.11	.79	[3.83, 4.38]
	No Label	3.93	.72	[3.65, 4.20]
Tell suspect to leave shelter*	Label	2.75	.80	[2.43, 3.08]
	No Label	2.04	.92	[1.71, 2.36]
Arrest suspect*	Label	2.93	.72	[2.61, 3.24]
	No Label	1.64	.95	[1.33, 1.96]
Tell shelter patron to file complaint*	Label	1.71	1.01	[1.28, 2.15]
	No Label	2.64	1.31	[2.21, 3.07]
File compliant for patron	Label	3.68	1.09	[3.30, 4.06]
	No Label	3.93	.90	[3.55, 4.31]

Note. Responses to the vignette were measured on a five point likert scale: 1 (not at all) to 5 (very much).

* $p < .001$

Table 7

Means, Standard Deviations, and Confidence Intervals for Police Officer Behavioral Responses given information about a Male Suspect versus a Female Suspect

Behavioral Response	Vignette Condition	<i>M</i>	<i>SD</i>	95% <i>CI</i>
No action	Male	2.57	1.14	[2.27, 2.88]
	Female	2.39	1.20	[2.09, 2.70]
Warn suspect to stay away	Male	4.25	.52	[4.01, 4.49]
	Female	4.32	.77	[4.08, 4.56]
Warn shelter patron to stay away from suspect	Male	4.04	.79	[3.74, 4.33]
	Female	4.29	.76	[3.99, 4.58]
Warn suspect about physically assaulting others	Male	3.79	.69	[3.51, 4.06]
	Female	4.25	.75	[3.97, 4.53]
Tell suspect to leave shelter	Male	2.21	.83	[1.89, 2.54]
	Female	2.57	1.00	[2.25, 2.90]
Arrest suspect	Male	2.07	.94	[1.76, 2.39]
	Female	2.50	1.14	[2.19, 2.81]
Tell shelter patron to file complaint	Male	1.89	1.17	[1.46, 2.32]
	Female	2.46	1.29	[2.03, 2.90]
File compliant for patron	Male	3.79	1.00	[3.41, 4.17]
	Female	3.82	1.02	[3.44, 4.20]

Note. Responses to the vignette were measured on a five point likert scale: 1 (not at all) to 5 (very much).

Table 8

Bivariate Correlations among Attributions on the AQ and Police Behavioral Responses

Attribution	Anger	Danger	Coercion	Segregation	Avoidance	Help	Pity	Credibility	Responsibility
<i>Behavioral Responses (Victim)</i>									
No action	.32	.55*	.66*	.36	.58*	-.05	.30	-.47*	-.57*
Tell victim to call if he/she sees anything else	.33	.60*	.66*	.32	.50*	-.19	.06	-.55*	-.39
Talk to neighbor	-.06	-.05	-.02	-.06	-.01	.19	-.04	.13	.15
Warn neighbor	-.22	.02	-.09	-.23	-.18	.11	-.13	.26	.14
File complaint	-.35	-.33	-.52*	-.34	-.52*	.06	-.23	.42	.39
<i>Behavioral Responses (Suspect)</i>									
No action	.30	.50*	.70*	.47*	.44	.18	.18	-.45	-.57*
Warn suspect to stay away	-.07	.19	.28	.27	.28	.20	.25	-.08	-.26
Warn patron to stay away	-.06	.07	.17	.15	.20	.20	.19	.03	-.17
Warn suspect about assaulting others	-.13	.12	.16	.16	.25	.13	.25	-.02	-.08
Tell suspect to leave shelter	.31	.41	.41	.27	.30	.37	.38	-.28	-.37
Arrest suspect	.38	.42	.64*	.40	.43	.29	.36	-.56*	-.48*
Tell patron to file complaint	-.19	-.24	-.35	-.30	-.31	-.30	-.13	.24	.25
File complaint	.08	-.10	-.13	-.15	-.05	.04	-.29	-.03	.08

Note. * $p < .0002$

Appendix A

Please read the following paragraph and answer the questions below.

You receive a call about a peeping Tom. When you arrive, Steve explains that his neighbor has been peeping in his windows. *You are familiar with Steve. Three months ago he had a mental health crisis and you assisted in transporting him to the hospital for an involuntary committal. He has schizophrenia and has been prescribed medication.*³ Steve shows you the window that he saw his neighbor looking in. You walk around the outside of the house and see what might be part of a footprint in front of the window well. However, the ground is dry and it is dark out, so it is difficult to tell what the indentation is or how long it has been there. Steve indicates he is positive that it was his neighbor looking in. You are aware of a history of problems between Steve and his neighbor.

For the following question(s) assume that law and organizational policy allow you full discretion in how you will handle this situation. Therefore, you are to rely only on your best judgment in responding to these situations. Please remember we are not looking for a right or wrong answer, just what you think is the best response given the information provided. Your responses are completely anonymous.

	Not at all				Very Much
1. How likely would you be to take no action?	1	2	3	4	5
2. How likely would you be to tell Steve you really cannot do anything, but to call if he sees anything else?	1	2	3	4	5
3. How likely would you be to knock on the neighbor's door and ask if he has been outside recently?	1	2	3	4	5
4. How likely would you be to warn the neighbor not to bother Steve?	1	2	3	4	5
5. How likely would you be to take a report and file a complaint for Steve?	1	2	3	4	5

³ The four vignettes in Appendix A constitute the mental illness label condition. The four vignettes in the no label condition differ only in that they do not include the italicized portions. Further, when the mental illness label condition is presented to the officers, the font will not be italicized.

Please read the following paragraph and answer the questions below.

You receive a call about a peeping Tom. When you arrive, Sarah explains that her neighbor has been peeping in her windows. *You are familiar with Sarah. Three months ago she had a mental health crisis and you assisted in transporting her to the hospital for an involuntary committal. She has schizophrenia and has been prescribed medication.* Sarah shows you the window that she saw her neighbor looking in. You walk around the outside of the house and see what might be part of a footprint in front of the window well. However, the ground is dry and it is dark out, so it is difficult to tell what the indentation is or how long it has been there. Sarah indicates she is positive that it was her neighbor looking in. You are aware of a history of problems between Sarah and her neighbor.

For the following question(s) assume that law and organizational policy allow you full discretion in how you will handle this situation. Therefore, you are to rely only on your best judgment in responding to these situations. Please remember we are not looking for a right or wrong answer, just what you think is the best response given the information provided. Your responses are completely anonymous.

	Not at all				Very Much
1. How likely would you be to take no action?	1	2	3	4	5
2. How likely would you be to tell Sarah you really cannot do anything, but to call if she sees anything else?	1	2	3	4	5
3. How likely would you be to knock on the neighbor's door and ask if she has been outside recently?	1	2	3	4	5
4. How likely would you be to warn the neighbor not to bother Sarah?	1	2	3	4	5
5. How likely would you be to take a report and file a complaint for Sarah?	1	2	3	4	5

Please read the following paragraphs and answer the questions below.

You are dispatched to a call at a local homeless shelter. The man who called, Tom, meets you in the parking lot and indicates that he had an argument with another shelter patron, Steve, and Steve pushed him and tore his coat. *You are familiar with Steve. Three months ago he had a mental health crisis and you assisted in transporting him to the hospital for an involuntary committal. He has schizophrenia and has been prescribed medication.* Steve denies pushing Tom or tearing his coat. The shelter staff indicate they heard an argument, but were not paying enough attention to see if anyone got pushed. You examine Tom's tattered and soiled coat and see a rip in the sleeve.

For the following question(s) assume that law and organizational policy allow you full discretion in how you will handle this situation. Therefore, you are to rely only on your best judgment in responding to these situations. Please remember we are not looking for a right or wrong answer, just what you think is the best response given the information provided. Your responses are completely anonymous.

	Not at all				Very Much
1. How likely would you be to take no action?	1	2	3	4	5
2. How likely would you be to warn Steve to stay away from Tom?	1	2	3	4	5
3. How likely would you be to warn Tom to stay away from Steve?	1	2	3	4	5
4. How likely would you be to warn Steve about physically assaulting others, especially Tom?	1	2	3	4	5
5. How likely would you be to advise Steve he must leave the shelter?	1	2	3	4	5
6. How likely would you be to arrest Steve for pushing Tom and damaging his coat?	1	2	3	4	5
7. How likely would you be to advise Tom that he can go to the station to file a complaint to have on record?	1	2	3	4	5
8. How likely would you be to take a report and file a complaint for Tom?	1	2	3	4	5

Please read the following paragraphs and answer the questions below.

You are dispatched to a call at a local homeless shelter. The woman who called, Kate, meets you in the parking lot and indicates that she had an argument with another shelter patron, Sarah, and Sarah pushed her and tore her coat. *You are familiar with Sarah. Three months ago she had a mental health crisis and you assisted in transporting her to the hospital for an involuntary committal. She has schizophrenia and has been prescribed medication.* Sarah denies pushing Kate or tearing her coat. The shelter staff indicate they heard an argument, but were not paying enough attention to see if anyone got pushed. You examine Kate's tattered and soiled coat and see a rip in the sleeve.

For the following question(s) assume that law and organizational policy allow you full discretion in how you will handle this situation. Therefore, you are to rely only on your best judgment in responding to these situations. Please remember we are not looking for a right or wrong answer, just what you think is the best response given the information provided. Your responses are completely anonymous.

	Not at all					Very Much
1. How likely would you be to take no action?	1	2	3	4	5	
2. How likely would you be to warn Sarah to stay away from Kate?	1	2	3	4	5	
3. How likely would you be to warn Kate to stay away from Sarah?	1	2	3	4	5	
4. How likely would you be to warn Sarah about physically assaulting others, especially Kate?	1	2	3	4	5	
5. How likely would you be to advise Sarah she must leave the shelter?	1	2	3	4	5	
6. How likely would you be to arrest Sarah for pushing Kate and damaging her coat?	1	2	3	4	5	
7. How likely would you be to advise Kate that she can go to the station to file a complaint to have on record?	1	2	3	4	5	
8. How likely would you be to take a report and file a complaint for Kate?	1	2	3	4	5	

Appendix B

Modified Attribution Questionnaire (Watson, Corrigan et al., 2004a)

Please circle the number of the answer which allows to you for each of the following.

	Not at all				Very Much
1. I would feel aggravated by Steve.	1	2	3	4	5
2. I would feel unsafe around Steve.	1	2	3	4	5
3. How angry does Steve make you feel?	1	2	3	4	5
4. I think Steve is a risk to other people.	1	2	3	4	5
5. I think Steve should be required to take psychiatric medication.	1	2	3	4	5
6. Steve poses a risk to the community unless he is hospitalized.	1	2	3	4	5
7. If I were an employer, I would be willing to interview Steve for a job.	1	2	3	4	5
8. I would be willing to talk to Steve about his problems.	1	2	3	4	5
9. I feel pity for Steve.	1	2	3	4	5
10. I believe Steve.	1	2	3	4	5
11. How much personal control does Steve have over his problems?	1	2	3	4	5
12. How irritated does Steve make you feel?	1	2	3	4	5
13. How dangerous is Steve?	1	2	3	4	5

	Not at all			Very Much		
14. It is Steve's own fault that he is in the present condition.	1	2	3	4	5	
15. How much do you agree that Steve should be forced into treatment with a psychiatrist, even if he does not want to?	1	2	3	4	5	
16. I think it is best for the community if Steve is placed in a psychiatric hospital.	1	2	3	4	5	
17. I would share a carpool with Steve each day.	1	2	3	4	5	
18. How much do you think a mental institution, where Steve could be kept away from his neighbors, is best? ⁴	1	2	3	4	5	
19. I feel threatened by Steve.	1	2	3	4	5	
20. How likely is it that Steve is lying?	1	2	3	4	5	
21. How likely is it that you would help Steve?	1	2	3	4	5	
22. How certain do you feel that you would help Steve?	1	2	3	4	5	
23. How much sympathy do you feel for Steve?	1	2	3	4	5	
24. How responsible is Steve for his situation?	1	2	3	4	5	

⁴ In the current study, the term 'asylum' has been replaced by 'psychiatric institution' to reflect modern terminology.

	Not at all				Very Much
25. How cautious would you be in handling Steve?	1	2	3	4	5
26. How sorry do you feel for Steve?	1	2	3	4	5
27. I would definitely try to avoid people like Steve.	1	2	3	4	5
28. How much concern do you feel for Steve?	1	2	3	4	5
29. If I were a landlord, I would probably rent an apartment to Steve.	1	2	3	4	5
30. Steve's account of the situation seems credible.	1	2	3	4	5
31. I think Steve should be required to live in a group home.	1	2	3	4	5

Modified Attribution Questionnaire (Watson, Corrigan et al., 2004a)

Please circle the number of the answer which allows to you for each of the following.

	Not at all					Very Much
1. I would feel aggravated by Sarah.	1	2	3	4	5	
2. I would feel unsafe around Sarah.	1	2	3	4	5	
3. How angry does Sarah make you feel?	1	2	3	4	5	
4. I think Sarah is a risk to other people.	1	2	3	4	5	
5. I think Sarah should be required to take psychiatric medication.	1	2	3	4	5	
6. Sarah poses a risk to the community unless she is hospitalized.	1	2	3	4	5	
7. If I were an employer, I would be willing to interview Sarah for a job.	1	2	3	4	5	
8. I would be willing to talk to Sarah about her problems.	1	2	3	4	5	
9. I feel pity for Sarah.	1	2	3	4	5	
10. I believe Sarah.	1	2	3	4	5	
11. How much personal control does Sarah have over her problems?	1	2	3	4	5	
12. How irritated does Sarah make you feel?	1	2	3	4	5	
13. How dangerous is Sarah?	1	2	3	4	5	

	Not at all					Very Much
14. It is Sarah's own fault that she is in the present condition.	1	2	3	4	5	
15. How much do you agree that Sarah should be forced into treatment with a psychiatrist, even if she does not want to?	1	2	3	4	5	
16. I think it is best for the community if Sarah is placed in a psychiatric hospital.	1	2	3	4	5	
17. I would share a carpool with Sarah each day.	1	2	3	4	5	
18. How much do you think a mental institution, where Sarah could be kept away from her neighbors, is best? ⁵	1	2	3	4	5	
19. I feel threatened by Sarah.	1	2	3	4	5	
20. How likely is it that Sarah is lying?	1	2	3	4	5	
21. How likely is it that you would help Sarah?	1	2	3	4	5	
22. How certain do you feel that you would help Sarah?	1	2	3	4	5	
23. How much sympathy do you feel for Sarah?	1	2	3	4	5	
24. How responsible is Sarah for her situation?	1	2	3	4	5	

⁵ In the current study, the term 'asylum' has been replaced by 'psychiatric institution' to reflect modern terminology.

	Not at all				Very Much
25. How cautious would you be in handling Sarah?	1	2	3	4	5
26. How sorry do you feel for Sarah?	1	2	3	4	5
27. I would definitely try to avoid people like Sarah.	1	2	3	4	5
28. How much concern do you feel for Sarah?	1	2	3	4	5
29. If I were a landlord, I would probably rent an apartment to Sarah.	1	2	3	4	5
30. Sarah's account of the situation seems credible.	1	2	3	4	5
31. I think Sarah should be required to live in a group home.	1	2	3	4	5

Modified Attribution Questionnaire Scoring Guide

Subscale	Items
Anger	1, 3, 12
Danger	2, 4, 13, 19, 25
Coercion	5, 15, 31
Segregation	6, 16, 18
Avoidance	7r, 17r, 27, 29r
Help	8, 21, 22
Pity	9, 23, 26, 28
Credibility	10, 20r, 30
Responsibility	11, 14, 24

Appendix C

Patrol Officer Survey (Borum et al., 1998)

Please check the answer which best applies to you for each of the following.

1. How prepared do you feel when dealing with people with mental illness in crisis?

Not at all A little Some Much Very Much

2. Overall, how prepared do you think other officers in the police organization are to deal with people with mental illness in crisis?

Not at all A little Some Much Very Much

3. Overall, how effective do you believe your organization's response to handling people with mental illness in crisis is in accomplishing the following objectives:

a. Meeting the needs of people with mental illness in crisis?

Not at all A little Some Much Very Much

b. Keeping people with mental illness out of jail?

Not at all A little Some Much Very Much

c. Minimizing the amount of time officers spend on these types of calls?

Not at all A little Some Much Very Much

d. Maintaining community safety?

Not at all A little Some Much Very Much

4. Relative to other problems the organization faces, how big of a problem are people with mental illness in crisis?

Not at all A little Some Much Very Much

5. How helpful is the mental health system in providing assistance to you when you are handling people with mental illness in crisis?

Not at all A little Some Much Very Much

6. How effective is the emergency room in providing assistance to you when you are handling people with mental illness in crisis?

Not at all A little Some Much Very Much

7. How much personal (*not professional*) experience do you have with persons with mental illness?

None A little Some Much Very Much

8. How many encounters with individuals with mental illness in crisis have you had in the past month?

Appendix D

Demographic Information Sheet

We would appreciate your responses to the following questions, which will be used solely for demographic purposes. **Your responses will be kept confidential and none of your responses will be associated with your name.**

1. **Please indicate your gender:** Female Male

2. **What is your age?** _____(years)

3. **What is your ethnicity?**

<input type="checkbox"/> Caucasian	<input type="checkbox"/> African-American
<input type="checkbox"/> Asian	<input type="checkbox"/> Hispanic
<input type="checkbox"/> Aboriginal	<input type="checkbox"/> Other (please specify) _____

4. **What is the highest education level you have attained?**

<input type="checkbox"/> High School	<input type="checkbox"/> Collage Diploma
<input type="checkbox"/> Bachelor's Degree	<input type="checkbox"/> Master's Degree
<input type="checkbox"/> Doctorate	<input type="checkbox"/> Other (please specify) _____

5. **How many years of service do you currently have with your current employer?**

6. **What is your current rank?**

<input type="checkbox"/> Constable	<input type="checkbox"/> Inspector
<input type="checkbox"/> Sergeant	<input type="checkbox"/> Staff Sergeant
<input type="checkbox"/> Other (please specify) _____	

7. **Have you ever been employed with other police organization(s)?**

<input type="checkbox"/> Yes	<input type="checkbox"/> No
------------------------------	-----------------------------

If yes, how many other organizations? _____

If yes, how many years of service did you have with each? _____

8. Have you received any training focused on mental health/illness issues:

Yes No

If yes, please describe:

Name/title of training _____

Specific topics addressed during training _____

Duration of training _____

Approximate date of training _____

Additional comments _____

Appendix E

Oral Consent Script

Hello, my name is Kathy Keating and I am a Doctor of Psychology (Psy.D.) student at Memorial University. I am currently conducting a research study, supervised by Dr. Brent Snook, which investigates police decision-making. I would like to invite you to participate in this study which will take approximately 20 minutes of your time.

If you decide to participate, you will be asked to read a brief passage and answer questions about what you have read. Following this, you will also be asked to fill out a demographic information sheet. If you do not wish to participate, there is a filler task provided in the questionnaire package for you to work on and/or complete during this time.

Throughout the study anonymity will be maintained. You will be asked to refrain from providing your name on the questionnaires and demographic sheet. You will be assigned a unique and anonymous code number to be used throughout the study that will not be associated with your name. All forms and questionnaires will be stored in a locked filing cabinet and will be destroyed upon the completion of the research. Further, only Dr. Snook and I will have access to the questionnaires. **At no time will your employers have access to the questionnaires, nor will they know who participated in the study and who did not.**

Your participation in this study is completely voluntary. Participation is not a requirement of your employment and choosing not to participate will not affect your job in any way. At any point during the study you have the right to not answer any question or to withdraw with no penalty whatsoever. The data will be used by researchers associated with this project for the purpose of research publications, conference presentations, or teaching material, and will be reported in an aggregated fashion. Your employer will have access to the *aggregate and anonymized data* only, as well as the overall results of this study, for the purpose of improving educational and training programs they deliver to officers.

This research has been approved by the Interdisciplinary Committee on Ethics in Human Research (ICEHR).

If you have any questions about this research, please feel free to ask me now.

I am now going to hand out an information letter which reiterates what I have just read. As well, if you should have questions at another time, this sheet includes my contact information as well as contact information for Dr. Snook. In addition, I have included the contact information for the Chairperson of the ICEHR in case you have any ethical concerns about this research that I have not dealt with.

Thank you.

Appendix F

Information Letter

The purpose of an information letter is to ensure that you, as the participant, understand the purpose of the study as well as the nature of your involvement.

Purpose: The purpose of this study is to investigate police-decision making. The results of this study will be used to extend the current research in this area.

Task requirements: This study will involve you reading a brief passage. You will then be asked to answer questions about what you have just read.

Duration: This study should take no longer than 20 minutes to complete.

Potential risks: You are under no obligation to continue the study if you experience discomfort or anxiety during any part of it, or if you feel uncomfortable to do so.

Benefits: Your participation in this study will be contributing toward the current body of literature on police judgment and decision making.

Anonymity and confidentiality: The data collected in this study are coded with a number that is not associated with your name and therefore all data are anonymous. The data will be used by researchers associated with this project for the purpose of research publications, conference presentations, or teaching material. Your employer will have access to the *aggregate and anonymized data* only, as well as the overall results of this study, for the purpose of improving educational and training programs they deliver to officers. **To ensure anonymity, please do not write your name anywhere on the questionnaires.** All forms and questionnaires will be stored in a locked filing cabinet and will be destroyed upon completion of this study.

Right to withdraw: Your participation in this study is entirely voluntary. Participation in this study is not a requirement of your employment and choosing not to participate or withdraw will not affect your job in any way. At any point during the study you have the right to not answer any question or to withdraw with no penalty whatsoever.

Research personnel: For questions about this study please contact Kathy Keating (k.keating@mun.ca or 709-737-7698) or Dr. Brent Snook (bsnook@play.psych.mun.ca or 709-737-3101), Department of Psychology, Memorial University.

The proposal for this research has been approved by the Interdisciplinary Committee on Ethics in Human Research at Memorial University of Newfoundland (ICEHR) and your employer. Should you have any ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Sincerely,

Kathy Keating, B.Sc. (Hons)
Psy.D. Candidate, Principal Researcher
Department of Psychology
Memorial University Of Newfoundland

