

Fall 12-10-2019

Examining Mental Health Stigma Among Police Officers and Intended Behavior Towards People with Mental Illness

Sara Soomro
s.soomro06@gmail.com

Follow this and additional works at: https://academicworks.cuny.edu/jj_etds



Part of the [Clinical Psychology Commons](#)

Recommended Citation

Soomro, Sara, "Examining Mental Health Stigma Among Police Officers and Intended Behavior Towards People with Mental Illness" (2019). *CUNY Academic Works*.
https://academicworks.cuny.edu/jj_etds/136

This Thesis is brought to you for free and open access by the John Jay College of Criminal Justice at CUNY Academic Works. It has been accepted for inclusion in Student Theses by an authorized administrator of CUNY Academic Works. For more information, please contact AcademicWorks@cuny.edu.

RUNNING HEAD: STIGMA AND INTENDED BEHAVIOR AMONG POLICE OFFICERS

Examining Mental Health Stigma Among Police Officers and Intended Behavior Towards
People with Mental Illness

Thesis
Spring 2017

Sara Soomro
John Jay College of Criminal Justice

Advisor: Professor Philip Yanos

Abstract

This research examines where or not stigma about mental illness exists among police officers in the United States and whether it shapes their attitudes about seeking mental health. It has been estimated that police officers have a prevalence rate of 13%, while the general population has a prevalence of 4%. Given the increased exposure to trauma, police officers are still unlikely to seek professional help. Moreover, police officers are first responders to incidents involving individuals with a mental illness and are often tasked with playing the role of a mental health professional. This study further examines how stigma effects intended behaviors towards people with a mental illness.

INTRODUCTION

Law enforcement is an occupation rooted in exposure to trauma, stress, possible death, and destruction on a day-to-day basis. The high stress environment of the job has been linked to a number of physical and mental health issues among police officers. Stress and trauma exposure, in combination with the police culture of limiting expression of emotions and personal feelings, and distrust of seeking help may put police officers in a position of being unable to adequately work through stressors and to form adaptive coping mechanisms (Craun, Bourke, Bierie, & Williams, 2014). It has been reported that when police officers are exposed to trauma they often do not acknowledge the trauma or they try to deal with the trauma on their own (Heffren, & Hausdorf, 2016).

Given their exposure to traumatic experiences, combined with the police culture of distrust of outsiders, and masculine values such as independence, emotional self-control and bravery, police officers are at an increased risk of developing a mental illness and have a greater need, than the general public, for psychiatric services (Bell & Eski, 2015). A study in the UK found that police officers' susceptibility to PTSD is four times higher than that of the general population, with a prevalence rate of 13% (Bell & Eski, 2015). A study of Brazilian police officers found the prevalence of PTSD among police officers to be 8.9% (Maia et al, 2007).

Police officers are also more likely than the general population to come into contact with people with a mental illness. As police officers are most often the first responders to incidents involving people with mental illnesses and are involved in the civil commitment and mental health crises processes, police officers have a substantial amount of contact with individuals with mental illness (Desmarais et al., 2014).

Police Officers – At Risk of Mental Health Issues

Rigorous training and requirements to qualify to become a member of the police force sets a standard of ‘perfection’ for police officers, both among themselves and in the eyes of the community. The general attitude encouraged among and towards law enforcement personnel is the perception that they do not have personal or work-related problems, particularly mental health problems (Berg, Hem, Lau, & Ekeberg, 2006).

A large body of research demonstrates that police officers undergo a multitude of stressors related to negative events on the job, and they adopt a variety of coping strategies to deal with the stress. The source of such stressors stems from two primary areas: occupational stressors, and organizational stressors. Occupational stressors emerge from the dangers of police work in the field (e.g., high-speed chases, involvement in shootings). Organizational stressors are derivative of the day-to-day aspects of the job (e.g., department size, rules, regulations, procedures, rotating shifts, chain of command, etc.) (Berg, Hem, Lau, & Ekeberg, 2006; Dabney, Copes, Tewksbury, & Hawk-Tourtlot, 2013). The frequency, rather than the severity, of stress has been associated with depersonalization experiences, where the officer’s adaption of the disproportionality of available resource and job demands breaks down due to the stress (Berg, Hem, Lau, & Ekeberg, 2006).

Stressors, both occupational and organizational, are also unique to various departments and positions. Evidence indicates that sex crimes are among the most difficult for law enforcement personnel to investigate, with the number of years investigating such crimes correlated with the level of stress among investigators (Craun, Bourke, Bierie, & Williams, 2014). Investigators working in online child pornography and exploitation cases also experience high levels of strain, stress, and pressure as a result of their high-risk assignments. Stressors

STIGMA AND INTENDED BEHAVIOR

unique to their expertise in addition to the regular stressors of being a police officer place them at significant risk for occupational dysfunction and psychological casualty (higher work load due to shortage of other forensic examiners, repeat exposure obscene content, unusual time demands) to when lacking adequate services to deal with occupations stressors (Krause, 2009). Homicide detectives report work stress stemming from the highly emotional nature of the work, time demands, and well-documented tasks that are unique to their department (Dabney, Copes, Tewksbury, & Hawk-Tourtlot, 2013).

Countless negative physical and psychological consequences are associated with the stressors of police work. Physical consequences include hypertension, and stroke. Psychological consequences include suicide, anxiety, post-traumatic stress disorder, neurosis, and emotional challenges (Carlan, & Nored, 2008). One study with Norwegian police officers reported that depressive symptoms were associated with work injuries and the frequency of lack of support. The study also found that men experienced more burnout and depression, but women reported more neuroticism (Berg, Hem, Lau, & Ekeberg, 2006). Rajaratnam et al. (2011) found that 40.4% of the police participants qualified for at least one sleep disorder, and these officers were also more likely to report exhibiting uncontrolled anger towards a suspect or citizen. Empirical research studying the physical consequences of sleep deprivation is consistent with these findings, as they provide evidence that individuals are unable to appropriately control their behavioral responses to negative emotional stimuli when in a state of sleep deprivation (Rajaratnam et al., 2011). Other empirical evidence supports that police officers have a high prevalence of depression and post-traumatic stress disorder (PTSD) (Karaffa, & Koch, 2015). The estimated current prevalence of PTSD among first responders in the United States is 5 – 36 % (4% for the general population) (Heffren, & Hausdorf, 2016).

STIGMA AND INTENDED BEHAVIOR

A number of theories have been applied to understand and illustrate the psychological issues prevalent among law enforcement officers. Bakker, and Heuven (2006) study found Hobfoll's Conservation of Resources Theory applicable in explaining burnout and emotional dissonance among police officers. They found that officers experiencing emotional dissonance and burnout would have to put in more effort towards regulating their emotional display which in turn made them susceptible to additional loss. Swatt, Gibson, and Piquero (2007) also found the General Strain Theory applicable in explaining alcohol use among police officers. They articulated that officers who experienced higher levels of strain/stress reported higher levels of negative affect/alcohol consumption.

Consequent of work-related stress, officers most often develop avoidant coping strategies which are later exhibited through substance abuse, gambling, and withdrawal from social support networks. Avoidant coping can later manifest into long-term consequences that further exacerbate the underlying causes of the problem (Carlan, & Nored, 2008; Swatt, Gibson, & Piquero, 2007). Numerous studies indicate that protective service workers (police officers included) are susceptible to a relatively higher rate of suicidal thoughts and behaviors. Additionally, empirical results indicate that police officers are less likely to die by an accident or homicide than they are to die by suicide (Stanley, Hom, & Joiner, 2016). Potential risk factors of suicide as a consequence of police work include sleep disturbances caused by shift work, disruption in family or social support resulting from shift work, lowering the fear of death caused by being first responders and facing life-threatening situations, and access to means of suicide (Stanley, Hom, & Joiner, 2016).

Police Culture

“Break a leg and you will get some sympathy, mention stress or depression and people think you are swinging the lead” (Bell & Eski, 2015). This quote adequately sums up the culture among law enforcement, one in which mental health problems like experiencing stress or depressive symptoms are not issues openly talked about, and physical ailments are more readily given appropriate attention. Seeking outside help is regarded with distrust and suspicion by other members of the group as it can display weakness, and officers can’t trust a ‘weak officer’ to back them up in dangerous situations.

White, Shrader, and Chamberlain (2015) compared the law enforcement mentality to that of a warrior’s—both value resilience, personal sacrifice, courage, and strength. Police officers undergo a rigorous training and hiring process. Throughout this process they are told that any loss of control over their emotions could potentially jeopardize their career (Karaffa, & Koch, 2015; Wester, & Lyubelsky, 2005). Additionally, in this traditionally male occupation (and still male dominated) recruits are taught to exhibit an image congruent with traditional male roles. During training an individual’s self-identity is broken down and rebuilt to fit the desired image of a persona exhibiting self-reliance, aggression, toughness, independence, and suppressing weakness. The police officer persona can be interchangeable with that of an ideal male. Deviation from the expected pattern of behavior is not welcome and may be punished (Wester, Arndt, Sedivy, & Arndt, 2010; Wester & Lyubelsky, 2005). Law enforcement personnel are held to a higher standard than other professionals. The nature of the job requires officers to protect each other in dangerous situations, and focuses on helping others at the expense of one’s personal needs (Stanley, Hom, & Joiner, 2016)

Mental Health Stigma Among Police Officers and Their Attitude Towards Help Seeking

Stigma is a major barrier to seeking psychological treatment. Consequently, roughly only 11 – 30% of people who experience mental health issues seek psychological help (White, Shrader, & Chamberlain, 2015). In the United States and Europe alone, roughly 52% – 74% of individuals with mental illness do not receive necessary treatment (Clement et al., 2015). Some factors associated with a reduced likelihood of seeking mental health treatment are being male, being of Asian, Latino, or African racial or ethnic identity, and the belief that seeking treatment means one is inferior or inadequate (White, Shrader, & Chamberlain, 2015). Stigma is among the key deterrents in seeking help, having a small to moderate size negative effect on help-seeking (Clement et al, 2015). Moreover, the police culture of valuing toughness, self-reliance, and suppressing weakness in combination with the distrust and suspicion of seeking outside help can further promote and enforce the negative beliefs around help – seeking among police officers.

Seeking psychological help can be of great benefit for law enforcement officers. Police officers working in environments that supported counseling had significantly less stress and need for the service than those working in environments where counseling was not as readily accepted (Carlan, & Nored, 2008). Taking proactive measures to deal with work-related stress decreased the level of stress experienced by those individuals. However, male officers were found to be less likely to seek help than female officers (Carlan, & Nored, 2008). Race (being a white officers) and counseling use significantly explained police stress but not demographic variables such as age, gender, and education. Other variables reported to contribute to police stress are hours worked, job position, years of service, partner status (whether or not the individual was in a relationship), and counseling opportunities (Carlan, & Nored, 2008).

STIGMA AND INTENDED BEHAVIOR

In examining the link between gender role conflict (GRC) and the stigma associated with counseling, Wester, Arndt, Sedivy, and Arndt (2010) found that GRC was accounted for by perception of either greater risks or lesser benefits associated with counseling, among the male officer participants. GRC predicted associating more risk and fewer benefits with counseling. Anticipated risks were found to mediate the relationship between GRC and stigma (both public and self), but anticipated benefits were not found to mediate the relationship (Wester, Arndt, Sedivy, & Arndt, 2010). White, Shrader, and Chamberlain (2015) examined the role of various factors in predicting stigma associated with mental health treatment among police officers. Results indicated that the size of the department and race were two significant factors in predicting both self – stigma and public stigma. Officers in larger departments experienced more organizational stress (White, Shrader, and Chamberlain, 2015). Other demographics such as gender, age, type of department, rank, and number of years employed were not significant in predicting stigma. As the size of the department increased, self – stigma was found to decrease. Race/ethnicity other than of Caucasian/European descent was associated with increased level of perceived public stigma (White, Shrader, & Chamberlain, 2015).

Two kinds of stigma are generally considered in the literature: public stigma, and self–stigma, both of which are negatively associated with seeking psychological help (Corrigan, 2004). Public stigma is when the public endorses the prejudice about a particular stigmatized group. Self–stigma is when members of the stigmatized group internalize the stigma that is endorsed by the public (Corrigan, 2004). Empirical results show that both self–stigma and public stigma are negatively associated with attitudes about seeking psychological help (Karaffa & Koch, 2015). Among police officers, both types of stigma deter officers from seeking help and from even discussing distressing issues with other officers lest they be deemed unfit to handle

STIGMA AND INTENDED BEHAVIOR

their occupational demands or unreliable as backup. Additionally, officers who perceive higher public stigma are more likely to have negative perceptions about seeking professional psychological help; however, awareness of public stigma alone is not related to help-seeking attitudes (Karaffa & Koch, 2015). Officers who voluntarily seek mental health services report significantly lower scores on self-stigma (Karaffa & Koch, 2015). Mental health stigma further affects help – seeking attitudes because individuals endorsing mental health stigma fear being associated with the label of “mentally ill” and therefore do not seek necessary help (Corrigan, 2004).

Similar reluctance is expressed by other police agencies globally. A study examining help-seeking attitudes among the Pakistani police force reported that fear of negative perceptions by other officers and superiors is one of the biggest obstacles in discussing stress and mental health. While officers expressed that such discussions with managers could boost morale and build a supportive environment if received without bias, seeking such support can be risky (Naz, Gavin, Khan, & Raza, 2014).

In spite of the aforementioned issues and the empirical evidence, police officers have more often than not abstained from seeking help or mental health services to work through their problems. They do not want to seem unable to handle their jobs, lose the trust of other officer in situations requiring them to be backup, and stigma associated with seeking help or with mental illness (Bell & Eski, 2015; Berg, Hem, Lau, & Ekeberg, 2006; Heffren & Hausdorf, 2016).

Intended Behavior Towards People with Mental Illness

People with a mental illness are more likely to come into contact with police officers than the general public and they are also more likely to report victimization (Desmarais et al., 2014). When asked about their opinions of law enforcement, individuals with mental illness reported

STIGMA AND INTENDED BEHAVIOR

negative expectations and perceptions of police officers, which influences their overall encounter with law enforcement (Desmarais et al., 2014). Police officers are often the first responders to situations involving people with mental illnesses. Consequently, police officers are tasked with engaging in the work of the mental health professions. This has earned them names such as ‘psychiatrist in blue’ or ‘de facto mental health service provider’ (Desmarais et al., 2014). Police are allowed discretion and have a number of both formal and informal options for dealing with incidents involving people with mental illness.

On average, roughly 13 million people are incarcerated every year in the United States, one million of whom have a serious mental illness. One explanation speaking to the increased incarceration of mentally ill persons is the criminalization hypothesis which states that the coupling of inadequate police training and deinstitutionalization is a reason of increased number of arrests of persons with mental illness (Morabito, 2007). Female inmates are also found to have higher rates of mental illness than males (Becker, Ansel, Boaz, & Constantine, 2011). However, empirical evidence indicates that men with a mental illness are more likely to be arrested than women with mental illness. In examining gender differences in arrest rates among individuals with a serious mental illness (SMI), results indicated that men were more likely than women to be arrested, regardless of if their individual arrest rates were low, medium, or high (Becker, Ansel, Boaz, & Constantine, 2011).

A number of possible explanations account for higher arrest rates for people with mental illness. Among the most influential reasons are: 1) officers do not have the necessary skills, training, or knowledge of mental illness, and 2) not enough available mental health services (Teplin, 2007). There is also a misconception that people with mental illness are dangerous, violent, and unpredictable. In assessing police officer attitudes towards mentally ill persons, a

STIGMA AND INTENDED BEHAVIOR

sample of Greek police officers reported that in the majority of their contacts with people with mental illnesses, the person was exhibiting threatening or violent behavior to either himself/herself or others, and was very unpredictable (Psarra, 2008). Higher arrest rates of people with mental illness is of great concern because the criminal justice system is not designed to be a major point of entry for the mentally ill and could greatly hinder an individual's access to adequate care. Additionally, criminalizing such persons increases their chances of being arrested for future disorderliness, thus creating a vicious cycle (Teplin, 2007).

In examining the effectiveness of various crisis intervention models in three police departments, Steadman, Deane, Borum, and Morrissey (2000) found that 66 – 75% of cases involving people experiencing a mental health crisis resulted in a mental health disposition rather than jail by responding officers. Treatment responses were linked to two key features: existence of psychiatric drop-off center and the police department viewing the program as part of the community policing initiative (Steadman, Deane, Borum, & Morrissey, 2000).

Other studies have found that police are reluctant to initiate hospitalization or make psychiatric referrals. Only in instances where an individual may cause or is causing serious harm do officers resort to mental health facilities, but only in the absence of other alternatives (Teplin 2007). Reports of how police officers deal with cases involving people with a mental illness indicate 72% of the time the matter is resolved informally, in 16% of cases an arrest is made, and only in 12% of the cases is hospitalization initiated (Teplin 2007).

Current Study

Mental health stigma and the barriers it poses to seeking help have earned significant attention in academia. However, very little of the research incorporates or focuses on police officers and the law enforcement community. The little research that does exist for law

STIGMA AND INTENDED BEHAVIOR

enforcement focuses on reasons why law enforcement officers are reluctant to seek help. Officers are subject to high levels of stress and potentially traumatic experiences and subsequently can benefit greatly from psychiatric services. To date, Heffren, and Hausdorf, (2016) and Karaffa, and Koch (2015) are the only study that have looked at existing mental health stigma among police officers and its effect on help-seeking behaviors. However, the study focused on a select number of variables and are the only ones. It is imperative to further study whether law enforcement communities hold mental health stigma, if stigma deters seeking treatment for any psychological issues that may arise, and if stigma plays a role in determining how an officer handles incidents involving people with mental illnesses. Much of the existing literature on how officers respond to incidents involving mentally ill persons is dated (to the early 2000s) or focuses on arrest rates. With a better understanding of what, if any, mental health stigmas are endorsed by police officers, we can better formulate efforts to combat these opinions and create an environment where officers feel comfortable in seeking help to cope with the stressor and dangers faced on the job. Knowledge and understanding of how stigma shapes a police officer's intended behavior towards people with mental illness allows agencies to work to alleviate barriers police officers have in dealing with people with mental illness and provide training to teach officers the skills necessary to adequately help and serve the community.

The present study aimed to determine if stigma about mental illness exists among police officers and whether specific variables predict level of stigma; if/how stigma influences police officers' intended behavior towards mentally ill persons; and police officers' attitudes towards help – seeking and whether specific variables predict level of stigma. Prior research indicates that there is stigma among police officers regarding seeking help for mental health issues. Moreover, despite being exposed to trauma, the use of mental health services is very low among

STIGMA AND INTENDED BEHAVIOR

police officers. Following these results, we hypothesized that police officers who endorse more negative stereotypes will also endorse more self-stigma regarding help seeking. We hypothesized that this relationship will hold even when controlling for trauma exposure and PTSD symptoms. We also hypothesized that endorsement of mental health stigma will have a positive relationship with police officers' intended behaviors in interaction with individuals with mental illness. Last, we hypothesized that our independent variables (gender, age, ethnicity, if the participant knows an individual with a mental illness, participant exposure to trauma, if and how much mental health training they have received) will predict endorsement of mental health stigma among police officers.

METHODS

Design

This cross-sectional study examined the predictors of stigma and help-seeking attitudes among police officers. Additionally, this research examined police officers' intended behavior towards persons with mental illnesses.

Research Participants

A Qualtrics Research Panel was used to recruit the sample of 620 police officer participants, 308 of whom claimed they were active duty police officers (312 said they were not active duty officers) and were thus included as participants in this study. Participation in the study was not limited to any demographic variables such as department, ranking, or region. Additional screening prior to the beginning of the survey eliminated identification issues such as feigning occupation. Of the 308 active duty officers, 56 were eliminated upon further analysis as they indicated that they were officers in different areas of law enforcement (such as corrections, parole, or probation).

Demographics

Our sample of active duty police officers consisted of 252 police officers. Table 1 reports demographic characteristics of the sample. As can be seen in Table 1, our sample consisted of mainly men (75%) in the 41 – 50 (~35.7%) and 50+ (~34.5%) age ranges. Most participants have been on the force for at least 15 years. The majority of the sample was comprised of white males (81.3%, $n = 205$) with some racial/ethnic diversity among Black/African Americans, Asian/Pacific Islander, Hispanic/Latinos, Indians, and biracial (about 18.7% of total sample, $n = 47$). Few women, particularly those of race/ethnic minorities, participated in the study. Women made up a total of 21.4% ($n = 54$) of the sample. The demographic make-up of the sample was expected, as the national census data shows that the police force consists of mainly white males (about 73%), some minority members (26%), and few females (12%). This sample result was expected as it was comparable to those listed in the US Department of Justice (Reaves, 2015).

TABLE 1: Characteristics of National Sample of Police Officers.

Characteristics	(n=252)	
	N	%
Gender		
Male	189	75
Female	54	21.4
Race/Ethnicity		
White	205	81.3
Black/African American	9	3.6
Native American/American Indian	1	0.4
Hispanic/Latino(a)	17	6.7
Asian/Pacific Islander	8	3.2
Bi/Multiracial	2	0.8
Other	2	0.8
Mental Health Training		
Yes	222	
No	19	

STIGMA AND INTENDED BEHAVIOR

Characteristics	(n=252)	
	N	%
Do You Know Someone with MI		
Yes	184	
No	58	
Region		
West	50	19.8
Midwest	59	23.4
Northeast	47	18.7
South	73	29.0
Age	3.02±0.912	
Education	7.36±1.421	
Years on Force	3.36±1.026	
Trauma Exposure		
Meet 'Likely' PTSD	22	8.7
BTQ	60	23.8
CIHQ	252	100

Ethics Statement

The first page of the online questionnaire adequately debriefed participants regarding the purpose of the study and stated participants that participation was strictly voluntary and that they may choose not to participate or choose to cease participation at any time. Participants were also notified that possible risks of participating in the study are anticipated to be the same as those posed in any conversation about the topics that were presented in the survey. Participant consent was obtained by participants agreeing to participate in the study and continuing on to the next page. Personal and identifying information was collected to ensure participants were active duty police officers, but such information was not reported in the analysis or report of the study. Any identifying and confidential information was kept in a safe and locked area. Access to this area was limited to the research team.

Procedure

STIGMA AND INTENDED BEHAVIOR

An initial email was sent by Qualtrics to members of their research panel asking for police officers, detailing the research and requesting participation in the study. The company did not reveal the identity of individuals on the list of participants. All certified police officers currently active on the police force were eligible to participate in the study and to complete the survey. Prior to the start of the online survey, participants were screened to ensure eligibility. IP addresses were monitored to ensure that a participant did not complete the survey more than once.

The research attempted to explore multiple areas: existing mental health stigma among police officers, help-seeking attitudes among police officers, and police officers' intended behavior towards people with mental illness. To study these issues, the survey asked questions pertaining to demographics (such as age, department, gender), current or previous experience dealing with people who have a mental illness, attitudes about mental illness, responses to hypothetical situations, and exposure to extreme or traumatic experiences.

Consent was obtained prior to the start of the survey. Personal and Identifying information (e.g., names, contact information, etc.) were not collected or used in the analysis or report of the study. The last page of the survey provided participants with a list of references to services participants can use should they feel they require them, as some questions and topics in the survey could potentially raise some negative or difficult to navigate feelings and emotions.

Instruments/Measures

Participants were asked to complete an online survey that required approximately 30 minutes for completion. The survey was composed of five sections: demographics, stigma ratings, intended behaviors, trauma exposure, and help – seeking attitudes. All scales used were self – report measures.

STIGMA AND INTENDED BEHAVIOR

Stigma ratings and intended behaviors were obtained through the Attitudes Towards Mental Illness Scale (AMIS), Reported and Intended Behavior Scale (RIBS), Mental Health Knowledge Schedule (MAKS), Mental Illness Microaggression Scale – Perpetrator Version (MIMS – P), and Attribution Questionnaire (AQ – 9). The AMIS is a 7 – item scale measuring negative stereotypes and perceptions about mental health recovery and outcomes. It is scored on a scale of 1 (strongly disagree) to 5 (strongly agree). AMIS has a reported to have a reliability ranging from 0.66 to 0.70 (Kobau, Diiorio, Chapman, & Delvecchio, 2009). The current study found internal consistency for the Negative Stereotype subscale to be 0.775, and for the Recovery subscale to be 0.655. The RIBS is an 8 – item scale. It asks questions regarding one’s experience with people with mental illness and as well as their views concerning people with mental illness. Questions pertaining to experience are scored either ‘yes’, ‘no’, or ‘I don’t know.’ Questions pertaining to views are scored on a 5-point Likert scale. The test–retest reliability is reported to be 0.75 and the overall internal consistency ranging 0.72 to 0.81 (Evans-Lacko et al, 2011). This study found the internal consistency to be 0.844 for the RIBS scale. MAKS is a 12 – item scale measuring the extent of mental health knowledge responders have. It is scored on a 5-point Likert scale with a reported reliability range of 0.54 to 0.87 (Evans-Lacko et al., 2010). The internal consistency in this study was 0.407. MIMS – P is a 14 – item scale scored from 1 (strongly disagree) to 4 (strongly agree). Higher scores show higher levels of microaggressive behavior. The reported internal consistency is 0.84 (Gonzales, Davidoff, Deluca, & Yanos, 2015). This study found MIMS-P to have an internal consistency of 0.873. The AQ – 9 is a 9 – item shortened version of the 27–item Attribution Scale. Internal consistency was found to be 0.416.

STIGMA AND INTENDED BEHAVIOR

Trauma Exposure was measured using the Brief Trauma Questionnaire (BTQ), Critical Incident History Questionnaire for Police Officer, and Post – Traumatic Stress Scale – Self Report Version (PLC – 5). The BTQ is a 10 – item self-report scale used to assess traumatic exposure, specifically asking about Criterion A.1 (DSM–5). All questions are scored ‘yes’ or ‘no.’ If one answers ‘yes’ then s/he answers follow-up questions about the event. This study found internal consistency to be 0.606. The Critical Incident History Questionnaire for Police Offices is used to measure police officers’ collective exposure to traumatic experiences by assessing the frequency and severity of the incidents. It is reported to have a content validity ranging from 0.90 to 0.94 (Weiss et al., 2010). The coefficient alpha for the individual scales ranged from .82 to > .90. In the current study, internal consistency was 0.944. This instrument is scored from 0 (not at all) to 4 (extremely). The PLC – 5 consists of 20 items that respondents score on a 5-point Likert scale. It is used to assess PTSD symptoms using the DSM-5 criteria. For each question respondents rate severity of distress associated with the symptoms from 0 (not at all) to 4 (extremely). Reliability and validity measurements were found for use of the scale with a sample of veterans. The Cronbach’s alpha score was .95 for a combination of two samples in the study (Bovin et al., 2015). This scale has also been used in a number of similar studies (Markowitz et al., 2015; Bleiberg & Markowitz, 2005). Internal consistency in the present study was 0.965. The original Post Traumatic Stress Disorder Checklist (PCL) was found to have an internal consistency ranging from 0.94 to 0.97 when used on motor vehicle accident victims, survivors of sexual assaults, and veterans. The test – retest reliability for veterans was 0.96. The validity of the PCL-M (a derivative of the PCL for military) is reported to range from 0.77 to 0.93 (Orsillo, 2001). Total symptom severity score can range from 0 – 88. A score of 33 is suggested as a cut–off point to indicate possible PTSD (PTSD, 2017).

STIGMA AND INTENDED BEHAVIOR

Help – seeking attitudes were measured by the Self – Stigma for Help Seeking Scale (SSOSH), and Perceptions of Stigmatization by Others for Seeking Help (PSOSH). Both these scales have been used in a study that looked at help – seeking attitudes among police officers in Arizona (White, Shrader, & Chamberlain, 2015). The SSOSH is a 10-item scale used to measure how much one feels his/her self-esteem is threatened by seeking mental health treatment. It is scored on a 5-point scale (1 – strongly disagree and 5 – strongly agree); 5 items are reversed scored. Higher scores indicate greater level of self-stigma. The SSOSH has an estimated internal consistency range from 0,86 to 0.90. Internal consistency in this study was 0.898. The test – retest reliability among a sample of college students was 0.72 (Vogel, Wade, & Haake, 2006; White, Shrader, & Chamberlain, 2015). The PSOSH is a 5 – item scale scored from 1 – 5 (not at all – a great deal). It is used to measure “how much those who interact with an individual seeking psychological help feel that there is a stigma attached to it” (Vogel, Wade, & Ascheman, 2009; White, Shrader, & Chamberlain, 2015). Reliability is reported to be 0.91 and the test – retest reliability is reported to be 0.82 (Vogel, Wade, & Ascheman, 2009; White, Shrader, & Chamberlain, 2015). Internal consistency for the present study was 0.94

DATA ANALYSIS

SPSS was used to conduct a multiple regression analysis to examine the relationship between variables. The independent variables looked at were gender, age, ethnicity, if the participant knows an individual with a mental illness, if the participant has been in an extreme or traumatic situation, and if and how much mental health training he/she has received. The equation for a regression analysis is: $\mu y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_p X_p$. This line was used to describe the change in mean responses as the explanatory variables change. Descriptive

STIGMA AND INTENDED BEHAVIOR

statistics were gathered for all variables. A correlation test was used to examine the strength of the relationship between the independent variables and the dependent variable.

Hypothesis 1: The variables predicted to have the strongest association with endorsement of mental health stigma were: if the participant has an individual with a mental illness in the family or close social circle; if the participant has been in an extreme or traumatic situation; and if and how much mental health training he/she has received.

Hypothesis 2: The variables predicted to have the strongest association to help – seeking attitudes were: gender, if the participant has been in an extreme or traumatic situation, endorsement of mental health stigma, and ethnicity.

Hypothesis 3: The variables predicted to have the strongest association with intended behaviors were: if the participant has an individual with a mental illness in the family or close social circle; and if and how much mental health training he/she has received.

RESULTS

Analysis Results

Most of the participants were white males who were in the 40 – 50+ age range and had been on the force for 15 or more years. Most of the participants had taken at least one mental health training course, although the length of the course is unclear. Roughly three quarters of the sample reported personally knowing someone with a mental illness. Roughly 89% of our national sample of officers reported having experienced a traumatic event, which is consistent with the current statistic for trauma exposure in the general population (89.7%) (Kilpatrick et al., 2013). In our sample, roughly 13% likely had PTSD. This is significantly higher than the general population in the United States, in which the rate of PTSD is about 8.3% for lifetime prevalence, and about half that (4.7%) for a 12-month prevalence rate (Kilpatrick et al., 2013).

STIGMA AND INTENDED BEHAVIOR

As can be seen in Table 2, our sample of police endorsed more stigma than the general population. The mean score for the Attribution Questionnaire was 4.06 (SD = 0.81), whereas in the general population's mean score is reported to be 3.83 (SD = 1.38) (DeLuca, Vaccaro, Seda, & Yanos, under review). The mean score for negative stereotypes in our police sample was 3.35 (SD = 0.77) and 2.70 (SD = 0.64) in the general population, a difference of roughly 1 standard deviation, indicating that police officers endorse more perceptions of dangerousness and unpredictability among people with mental illness than do general community members. Similarly, police officers reported considerably more willingness to maintain social distance from people with mental illness than do general community members on the RIBS. The mean RIBS score for the general population was 2.22 (SD = 0.99) and 3.50 (SD = 0.88) for this police sample. Self-stigma regarding seeking help among our police sample was similar to the general population but was markedly higher for perceived stigma. The mean score on the PSOSH for the police sample was 4.30 (SD = 1.33) and 1.84 (SD = 1.01) for the general population, a difference of over 2 standard deviations, indicating that police officers perceive considerably more stigma among seeking help for mental health concerns than do general community members (DeLuca, Vaccaro, Seda, & Yanos, under review).

TABLE 2: Summary of Mean Stigma Scale Scores Compared to General Population
(n=252)

Characteristics	Police Sample	General Population
AIMS 7 Items	2.67±0.47	2.28±0.58
AIMS Negative Stereotype	3.35±0.77	2.70±0.64
AIMS Recovery	2.16±0.62	1.97±0.64
AQ-9	4.06±0.81	3.83±1.38
MIMSP	2.33±0.46	2.21±0.40
MAKS 12 Items	3.82±0.38	n/a
MAKS Recognition	3.88±0.45	n/a
RIBS	3.50±0.88	2.22±0.90
SSOSH	2.45±0.74	2.40±0.74
PSOSH	4.30±1.33	1.84±1.01

STIGMA AND INTENDED BEHAVIOR

A separate standard multiple linear regression was calculated to predict each dependent variable endorsement of mental health stigma, help – seeking attitudes, and intended behavior towards offenders with a mental illness. The independent variables in the regression were police officers’ gender, age, ethnicity, if they know an individual with mental illness, if they have been in an extreme or traumatic situation, and if and how much mental health training they have received. Table 3-5 report findings from these analyses.

TABLE 3: Summary of Regression Analysis for Variables Predicting Mental Health Stigma

Variable	<i>B</i>	SE <i>B</i>	β
Equation 1 (MIMSP)			
Know someone with MI (0=Yes; 1=No)	0.08	0.071	0.074
Received MH Training (1=Yes; 2=No)	0	0.097	0
BTQ Mean	-0.158	0.172	-0.65
CIHQ – Exposure	0.021	0.018	0.081
Likely PTSD	0.215	0.107	0.131*
(F(5, 230) = 1.656, $p > .05$), with an R^2 of .035			
Equations 2 (MAKS Rec)			
Likely PTSD	-0.27	0.096	-0.178**
Know anyone with a MI	-0.151	0.064	-0.152*
Received MH Training	0.036	0.087	0.026
BTQ Mean	0.13	0.154	0.058
CIHQ – Exposure	-0.047	0.016	-0.192**
(F(5, 230) = 5.089, $p < .01$), with an R^2 of .100			
Equation 3 (AMIS Rec)			
Likely PTSD	0.5	0.138	0.229**
Know anyone with a MI	0.017	0.092	0.012
Received MH Training	-0.073	0.125	-0.037
BTQ Mean	-0.657	0.221	-0.202**
CIHQ – Exposure	0.02	0.024	0.058
(F(5,230) = 4.692, $p < .01$), with an R^2 of .073			

STIGMA AND INTENDED BEHAVIOR

Equation 4 (AMIS Neg Ster)

Likely PTSD	-0.001	0.187	0
Know anyone with a MI	0.151	0.124	0.081
Received MH Training	0.268	0.169	0.104
BTQ Mean	0.243	0.299	0.058
CIHQ – Exposure	-0.031	0.032	-0.069

(F(5, 230) = 1.100 $p > .05$), with an R^2 of .023

Equation 5 (AQ)

Likely PTSD	0.42	0.18	0.153*
Know anyone with a MI	0.022	0.119	0.012
Received MH Training	0.038	0.163	0.015
BTQ Mean	-0.325	0.288	-0.079
CIHQ – Exposure	0.014	0.031	0.032

(F(5, 230) = 1.485 $p > .05$), with an R^2 of .031

TABLE 4: Summary of Regression Analysis for Variables Predicting Help Seeking Attitudes

Variable	<i>B</i>	SE <i>B</i>	<i>B</i>
Equation 6 (PSOSH)			
Gender (0=Female; 1=Male)	-0.427	0.193	-0.141*
Likely PTSD	-0.726	0.279	-0.166**
CIHQ – Exposure	-0.034	0.046	-0.047
AQ Mean	-0.115	0.116	-0.07
AMIS Neg Ster Mean	-0.087	0.116	-0.054
AMIS Rec Mean	-0.293	0.137	-0.141*
MIMSP Mean	-0.3	0.2	-0.109
Race/Ethnicity (0=White; 1=All Other)	0.192	0.214	0.056
(F(8.230) = 5.085, $p < .01$), with an R^2 of .121			
Equation 7 (SSOSH)			
Gender (0=Female; 1=Male)	0.274	0.114	0.153*
Likely PTSD	0.329	0.165	0.127*
CIHQ – Exposure	-0.002	0.027	-0.005
AQ Mean	0.069	0.069	0.07
AMIS Neg Ster Mean	0.031	0.069	0.033
AMIS Rec Mean	0.126	0.081	0.102
MIMSP Mean	0.282	0.118	0.173*
Race/Ethnicity (0=White; 1=All Other)	-0.289	0.126	-0.141*
(F(8, 230) = 5.155, $p < .01$), with an R^2 of .010			

STIGMA AND INTENDED BEHAVIOR

TABLE 5: Summary of Regression Analysis for Variables Predicting Intended Behaviors

Variable	<i>B</i>	SE <i>B</i>	β
Equation 8 (RIBS)			
Received MH Training	-0.237	0.181	-0.084
Know anyone with a MI	-0.607	0.124	-0.301**

($F(1, 240) = 23.952, p < .01$), with an R^2 of .087

Overall, our first hypothesis was not significant in predicting stigma on the microaggression scale, endorsement of negative stereotypes, and the stigma measure (AQ9). However, the meeting criteria for likely PTSD itself was significant in predicting all the stigma outcome variables, indicating that officers who have meet the criteria for PTSD are endorsing stigmas about mental illness.

The first hypothesis was significant in predicting stigma on the mental health knowledge scale, with results indicating that having likely PTSD, knowing someone with a mental illness, and being exposed to traumatic incidents negatively predict stigma endorsement. In other words, endorsement of stigma increases for officers with lower scores on the PTSD scale, with less exposure to traumatic incidents, and who do not know someone with a mental illness (see Table 3, equation 2). Hypothesis 1 was significant in predicting attitudes about recovery subscale, with PCL_Cutoff scoring 33 or above to indicate likely PTSD) and trauma exposure significantly predicting officer’ outlook on mental illness recovery (See Table 3, equation 3). This hypothesis was not significant in predicting negative attitudes subscale. While the stigma scale about schizophrenia did not demonstrate significance, the PCL_CutOff variable, individually, was significant (see table 3, equation 5).

The second hypothesis stated endorsement of mental health stigma will be positively associated with negative help – seeking attitudes. In other words, the more participants endorsed mental health stigma the more they also endorsed negative attitudes towards help – seeking. Self

STIGMA AND INTENDED BEHAVIOR

Stigma for Seeking Help scale (SSOSH) was found to be significant. Individual variables that were significant in predicting SSOSH were Gender, PCL_CutOff, microaggression, and Race/Ethnicity (see table 4, equation 7). The Perceptions of Stigmatization by Other for Seeking Help scale (PSOSH) was also found to be significant, with Gender, PCL_CutOff, and attitudes about recovery subscale being the best predictors of perceived stigma (see table 4, equation 6).

Hypothesis 3 predicted mental health training would be negatively associated with intended behaviors of discrimination; the less mental health training officers had received, the more discriminatory the reported intended behaviors were. The results of this analysis reveal knowing someone with a mental illness is significant in predicting intended behaviors. Having received mental health training was not significant (see Table 5, Equation 8).

DISCUSSION

Consistent with the literature, results from the current study indicated that police officers are suffering from significantly higher rates of current PTSD than the general population, more than double the lifetime prevalence rate. However, contrary to existing literature, police officers scoring higher on the PTSD measure or reporting more traumatic exposure also endorsed more stigma about mental health and rejected seeking mental health treatment. There is a pertinent need for increased mental health awareness and normalizing of PTSD experiences among police officers. Police departments should work to create a work environment that accepts and also encourages officers to speak about the atrocities encountered on the job. It will be beneficial for police officers to have a working knowledge of mental health and mental disorders (PTSD in particular) so they can recognize signs in fellow officers and provide an encouraging and supportive atmosphere for seeking psychological help.

STIGMA AND INTENDED BEHAVIOR

Stigma levels are also significantly increased among police officers in general. This significantly higher endorsement of stigma indicates the need for increased mental illness awareness and training in interacting with individuals with a mental illness. However, results of this study indicate that having received mental health training was not significant in predicting mental health stigma among this population. This is inconsistent with existing literature, which states individuals endorse less stigma about mental illness when they know someone with a mental illness. A possible explanation for this is police officers generally only interact with people with mental illness in a criminal setting, which further feeds any existing stereotypes. In light of this, it is of benefit for future research to explore what is causing increased mental health stigma among police and tailoring police training to counteract such stigma.

Results show operational variables did have some predictive accuracy for mental health stigma and help – seeking attitudes, the most significant of which were meeting the cutoff for likely PTSD, and having exposure to traumatic experiences. Having received mental health training was a significant predictor of intended behavior towards persons with a mental illness. The findings of this research are not completely consistent with existing literature in this area, particularly with regards to the variable ‘knowing someone with a mental illness.’ Mental health stigma research has consistently found that knowing someone with a mental illness or having mental health problems decreases the endorsement of stigma. Contrary to these data, the results of this study indicate that officers knowing someone with a mental illness does not significantly affect endorsement of stigma. As this is a new finding, additional research is needed to examine what about police culture or being an officer contributes to this finding. Having mental health issues, particularly having likely PTSD, increases the endorsement of such stigma. Moreover, those with probable PTSD are endorsing more self-stigma about seeking mental health services

STIGMA AND INTENDED BEHAVIOR

and are less likely to seek professional help for their problems. Literature states that individual who have a mental illness endorse less stigma. Police culture of being emotionally strong, brave, and to protect may play a role in explaining the discrepancy between the literature and our findings. While having likely PTSD seems to decrease the stigma officers perceive from other officers, female officers seem to be more likely to perceive stigma from others while male officers are more likely to internalize the stigma. Given that law enforcement is a traditionally male occupation, female officers may feel the need to appear stronger and tougher.

Consequently, female officers perceive more stigma from others, because they feel more pressure to display a strong and tough persona. Male officers internalize stigma more because they fear being perceived as weak.

Implication for Treatment or Policy

Police officers have roughly a four times higher risk of developing a mental illness (than the general population) due to the dangerous nature of their work and the stressors that accompany it (both occupational and organizational). Given the increased risk police officers face of developing mental health issues such as PTSD, seeking professional help can be very beneficial in coping with stressors and the job. Our results indicate that the police culture of self-reliance, aggression, toughness, independence, and suppressing weakness combined with the distrust and suspicion of seeking outside help enforces stigma regarding help-seeking among police officers. The results of this study provide greater support for implementation of efforts combating mental health stigma and negative help-seeking attitudes, fostering an environment where officers feel comfortable in seeking help to better handle and cope with the stressors and dangers faced on the job.

STIGMA AND INTENDED BEHAVIOR

The findings of this study, considering existing literature, have the potential to greatly impact the policy and community of the police force. They also provide several implications. One possible implication could be that police administration may consider changing the attitude regarding help-seeking by implementing some form of mandatory counseling for their police officers and making a more open and accepting environment to talk about trauma and stressors. Departments having a supporting counseling climate have found police officers report experiencing significantly less stress and a greater willingness to use counseling (Carlan & Nored, 2008). Studies that have experimented with an implementation for mandatory counseling found that police officers have a greater awareness of their need for counseling (Carlan & Nored, 2008). Our findings regarding police officers' intended behaviors were consistent to those found in the literature. Hospitalization or referral to a psychiatric facility was the last option considered when determining how to proceed with an offender who had a mental illness. The most likely option is often arrest or informal resolution. However, neither option works to provide offenders with the care they need. Given police officers' reputation of 'de facto mental health service provider' it is suggested that an implementation of a programs to compact stigma surrounding mental illness and educate police officers with knowledge of how to communicate with and help individuals with a mental illness should be considered. It may also be beneficial to provide mental health training to recruit training in the police academy.

It is suggested that existing and successful models, both for police counseling and for mental health training for police officers should be more widely implemented among police departments. The New York City Police Department currently has in place a program called Crisis Intervention Training. This program was developed through collaborations with police department experts and mental health professionals from local universities. One purpose of this

STIGMA AND INTENDED BEHAVIOR

program is to provide police officers with training that better equips them to deal with incidents involving distressed individuals. Reports indicate officers who go through this four-day interactive training feel more confident when dispatched on such calls and they feel they are better able to recognize mental illness (“NYPD Crisis Intervention Team (CIT) Training”, 2017).

Limitations and Directions for Future Research

While the sample demographics of this study reflected the national demographic profile of police officers, the sample was mostly white, middle aged, males. In future research, it would be beneficial to further analyze the role of gender and race/ethnicity of police officers in endorsing mental health stigma and help – seeking attitudes, and intended behaviors towards individuals with a mental illness. Additionally, it would be interesting to examine any gender difference in prevalence of PTSD among police officers. Our results showed male officers seem to internalize stigma more than female officers, but female officers perceive more stigma from others than do male officers. Additional research should examine this intersection of police culture and gender. There is little research in the field regarding this area of study, so further research examining the validity of the results found here would be beneficial. Another intriguing topic to examine is whether police officers’ intended behaviors differ depending on the type of mental health issue they are being faced with. Do intended behaviors differ if the offender has schizophrenia vs. an offender with PTSD? The literature on police culture indicates that the police culture advocates negative help – seeking attitudes, but there is no research that examines what aspects of the police culture are most associated with negative help – seeking attitudes. Additionally, while our sample was obtained nationally, this study does not examine any regional difference among police attitudes. Future research should consider examining how

STIGMA AND INTENDED BEHAVIOR

regional differences (and prominent culture and politics of regions) affect the variables and whether regional differences both nationally and internationally.

References

- Bakker, A. B., & Heuven, E. (2006). Emotional dissonance, burnout, and in-role performance among nurses and police officers. *International Journal of Stress Management, 13*(4), 423-440. doi:10.1037/1072-5245.13.4.423
- Becker, M. A., Andel, R., Boaz, T., & Constantine, R. (2010). Gender Differences and Risk of Arrest Among Offenders with Serious Mental Illness. *The Journal of Behavioral Health Services & Research, 38*(1), 16-28. doi:10.1007/s11414-010-9217-8
- Bell, S., & Eski, Y. (2015). 'Break a Leg—It's all in the mind': Police Officers' Attitudes towards Colleagues with Mental Health Issues. *Policing, 10*(2), 95-101. doi:10.1093/police/pav041
- Berg, Anne Marie, Hem, Erlend, Lau, Bjorn, & Ekeberg, Oivind. (2006). An exploration of job stress and health in the Norwegian police service: A cross sectional study.(Research). *Journal of Occupational Medicine and Toxicology (London), 1*, Journal of Occupational Medicine and Toxicology (London), Dec, 2006, Vol.1.
- Bleiberg, K. L., & Markowitz, J. C. (2005). A Pilot Study of Interpersonal Psychotherapy for Posttraumatic Stress Disorder. *American Journal of Psychiatry AJP, 162*(1), 181-183. doi:10.1176/appi.ajp.162.1.181
- Carlan, P. E., & Nored, L. S. (2008). An Examination of Officer Stress: Should Police Departments Implement Mandatory Counseling? *Journal of Police and Criminal Psychology J Police Crim Psych, 23*(1), 8-15. doi:10.1007/s11896-008-9015-x
- Clement, S., Schauman. O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsç, N., Brown, J. S. L., & Thornicroft, G. (2015). What is the impact of

STIGMA AND INTENDED BEHAVIOR

- mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, 45, 11–27
- Corrigan, P. (2004). How Stigma Interferes With Mental Health Care. *American Psychologist*, 59(7), 614-625.
- Craun, S. W., Bourke, M. L., Bierie, D. M., & Williams, K. S. (2014). A Longitudinal Examination of Secondary Traumatic Stress among Law Enforcement. *Victims & Offenders*, 9(3), 299-316. doi:10.1080/15564886.2013.848828
- Dabney, D. A., Copes, H., Tewksbury, R., & Hawk-Tourtlot, S. R. (2013). A Qualitative Assessment of Stress Perceptions Among Members of a Homicide Unit. *Justice Quarterly*, 30(5), 811-836. doi:10.1080/07418825.2011.633542
- DeLuca, J. S., Vaccaro, J., Seda, J., & Yanos, P. T. (under review). Political attitudes as predictors of the multiple dimensions of mental health stigma.
- Desmarais, S. L., Livingston, J. D., Greaves, C. L., Johnson, K. L., Verdun-Jones, S., Parent, R., & Brink, J. (2014). Police perceptions and contact among people with mental illnesses: Comparisons with a general population survey. *Psychology, Public Policy, and Law*, 20(4), 431-442. doi:10.1037/law0000023
- Evans-Lacko, S., Rose, D., Little, K., Flach, C., Rhydderch, D., Henderson, C., & Thornicroft, G. (2011). Development and psychometric properties of the Reported and Intended Behaviour Scale (RIBS): A stigma-related behaviour measure. *Epidemiology and Psychiatric Sciences*, 20(03), 263-271. doi:10.1017/s2045796011000308
- Gonzales, L., Davidoff, K., Deluca, J., & Yanos, P. (2015). The mental illness microaggressions scale-perpetrator version (MIMS-P): Reliability and validity. *Psychiatry Research*, 229(1-2), 120-5

STIGMA AND INTENDED BEHAVIOR

Heffren, C., & Hausdorf, P. (2016). Post-traumatic effects in policing: Perceptions, stigmas and help seeking behaviours. *Police Practice and Research*, 17(5), 420-433.

Jaycox, L. H., Marshall, G. N., & Schell, T. (2004). Use of Mental Health Services by Men Injured Through Community Violence. *Psychiatric Services*, 55(4), 415-420.
doi:10.1176/appi.ps.55.4.415

Karaffa, K. M., & Koch, J. M. (2015). Stigma, Pluralistic Ignorance, and Attitudes Toward Seeking Mental Health Services Among Police Officers. *Criminal Justice and Behavior*, 43(6), 759-777. doi:10.1177/0093854815613103

Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National Estimates of Exposure to Traumatic Events and PTSD Prevalence Using *DSM-IV* and *DSM-5* Criteria. *Journal of Traumatic Stress*, 26(5), 537-547.
<http://doi.org/10.1002/jts.21848>

King's College London - CMH Measures. (n.d.). Retrieved October 20, 2016, from
<http://www.kcl.ac.uk/ioppn/depts/hspr/research/ciemh/cmh/CMH-Measures.aspx>

Kobau, R., Diiorio, C., Chapman, D., & Delvecchio, P. (2009). Attitudes About Mental Illness and its Treatment: Validation of a Generic Scale for Public Health Surveillance of Mental Illness Associated Stigma. *Community Mental Health Journal*, 46(2), 164-176.
doi:10.1007/s10597-009-9191-x

Krause, M. (2009). Identifying and Managing Stress in Child Pornography and Child Exploitation Investigators. *Journal of Police and Criminal Psychology J Police Crim Psych*, 24(1), 22-29. doi:10.1007/s11896-008-9033-8

List of All Measures - PTSD: National Center for PTSD. (n.d.). Retrieved October 20, 2016, from http://www.ptsd.va.gov/professional/assessment/all_measures.asp

STIGMA AND INTENDED BEHAVIOR

Maia, D. B., Marmar, C. R., Metzler, T., Nóbrega, A., Berger, W., Mendlowicz, M. V., . . .

Figueira, I. (2007). Post-traumatic stress symptoms in an elite unit of Brazilian police officers: Prevalence and impact on psychosocial functioning and on physical and mental health. *Journal of Affective Disorders*, 97(1-3), 241-245. doi:10.1016/j.jad.2006.06.004

Markowitz, J. C., Petkova, E., Neria, Y., Meter, P. E., Zhao, Y., Hembree, E., . . . Marshall, R.

D. (2015). Is Exposure Necessary? A Randomized Clinical Trial of Interpersonal Psychotherapy for PTSD. *American Journal of Psychiatry AJP*, 172(5), 430-440. doi:10.1176/appi.ajp.2014.14070908

Morabito, M. (2007). Horizons of context: Understanding the police decision to arrest people with mental illness. *Psychiatric Services*, 58(12), 1582-1587.

doi:10.1176/appi.ps.58.12.1582

Naz, S., Gavin, H., Khan, B., & Raza, M. S. (2014). Cross cultural variations in attitude towards use of psychological support among police officers. *Pakistan Journal of*

Criminology, 6(1), 31-46. Retrieved from

<http://ez.lib.jjay.cuny.edu/login?url=http://search.proquest.com/docview/1764124183?accountid=11724>

NYPD Crisis Intervention Team (CIT) Training. (n.d.). Retrieved October 03, 2017, from

<http://nypdnews.com/cit/>

Orsillo, S. M. (2001). Measures for acute stress disorder and posttraumatic stress disorder. In

M.M. Antony & S.M. Orsillo (Eds.), *Practitioner's guide to empirically based measures of anxiety* (pp. 255-307). New York: KluwerAcademic/Plenum. PILOTS ID 24368

Pogrebin, M. R., & Poole, E. D. (1991). Police and tragic events: The management of emotions.

Journal of Criminal Justice, 19(4), 395-403. doi:10.1016/0047-2352(91)90036-u

STIGMA AND INTENDED BEHAVIOR

- Psarra, V., Sestrini, M., Santa, Z., Petsas, D., Gerontas, A., Garnetas, C., & Kontis, K. (2008). Greek police officers' attitudes towards the mentally ill. *International Journal of Law and Psychiatry*, *31*(1), 77-85. doi:10.1016/j.ijlp.2007.11.011
- PTSD: National Center for PTSD. (2017, May 11). Retrieved October 13, 2017, from <http://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp>
- Rajaratnam, S. M., Barger, L. K., Lockley, S. W., Shea, S. A., Wang, W., Landrigan, C. P., . . . For The Harvard Work Hours, Health And Safety Group. (2011). Sleep Disorders, Health, and Safety in Police Officers. *Jama*, *306*(23), 2567. doi:10.1001/jama.2011.1851
- Reaves, B. A. (2015, May). *Bureau of Justice Statistics Bulletin* (Local Police Departments, 2013: Personnel, Policies, and Practices). Retrieved from Bureau of Justice Statistics website: <http://www.bjs.gov/content/pub/pdf/lpd13ppp.pdf>
- Schnurr, P., Vielhauer, M., Weathers, F., & Findler, M. (1999). The Brief Trauma Questionnaire (BTQ) [Measurement instrument]. Available from <http://www.ptsd.va.gov>
- Stanley, I. H., Hom, M. A., & Joiner, T. E. (2016). A systematic review of suicidal thoughts and behaviors among police officers, firefighters, EMTs, and paramedics. *Clinical Psychology Review*, *44*, 25-44. doi:10.1016/j.cpr.2015.12.002
- Steadman, H. J., Deane, M. W., Borum, R., & Morrissey, J. P. (2000). Comparing Outcomes of Major Models of Police Responses to Mental Health Emergencies. *PS Psychiatric Services*, *51*(5), 645-649. doi:10.1176/appi.ps.51.5.645
- Teplin, L. A. (2007). Keeping the Peace: Police Discretion and Mentally Ill Persons. *PsycEXTRA Dataset*. doi:10.1037/e528652006-002
- Vogel, D. L., Wade, N. G., & Ascheman, P. L. (2009). Measuring perceptions of stigmatization by others for seeking psychological help: Reliability and validity of a new stigma scale

STIGMA AND INTENDED BEHAVIOR

with college students. *Journal of Counseling Psychology*, 56, 301–308.

doi:10.1037/a0014903

Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, 53, 325–337.

doi:10.1037/0022-0167.53.3.325

Weiss, D. S., Brunet, A., Best, S. R., Metzler, T. J., Liberman, A., Pole, N., . . . Marmar, C. R. (2010). Frequency and severity approaches to indexing exposure to trauma: The Critical Incident History Questionnaire for police officers. *Journal of Traumatic Stress*, 23(6), 734-743. doi:10.1002/jts.20576

Wester, S. R., Arndt, D., Sedivy, S. K., & Arndt, L. (2010). Male police officers and stigma associated with counseling: The role of anticipated risks, anticipated benefits and gender role conflict. *Psychology of Men & Masculinity*, 11(4), 286-302. doi:10.1037/a0019108

Wester, S. R., & Lyubelsky, J. (2005). Supporting the Thin Blue Line: Gender-Sensitive Therapy With Male Police Officers. *Professional Psychology: Research and Practice*, 36(1), 51-58. doi:10.1037/0735-7028.36.1.51

Weathers, F.W., Litz, B.T., Keane, T.M., Palmieri, P.A., Marx, B.P., & Schnurr, P.P. (2013).

The PTSD Checklist for *DSM-5* (PCL-5). Schnurr, P., Vielhauer, M., Weathers, F., &

Findler, M. (1999). The Brief Trauma Questionnaire (BTQ) [Measurement instrument].

Available from <http://www.ptsd.va.gov>

White, A. K., Shrader, G., & Chamberlain, J. (2015). Perceptions of Law Enforcement Officers in Seeking Mental Health Treatment in a Right-to-Work State. *Journal of Police and Criminal Psychology J Police Crim Psych*, 31(2), 141-154. doi:10.1007/s11896-015-9175-4