

Predictors of Mental Health Stigma among Police Officers: the Role of Trauma and PTSD

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Abstract

Police officers are both at risk of exposure to trauma and experiencing PTSD and are more likely to come into contact with people with mental illness than community members. As a result, the extent and predictors of mental health stigma is an issue of concern among police officers; however, little prior research on stigma has focused on police officers. The present study examined the predictors of mental health stigma among police officers, including the experience of trauma and PTSD symptoms. Active duty police officers (N = 296) were recruited through an online survey and completed measures of trauma exposure, PTSD symptoms, and a number of dimensions of stigma (negative stereotypes, attributions, intended behavior, and attitudes toward seeking help). Findings supported that police officers experience high rates of trauma exposure and higher rates of current PTSD than the general population. Endorsement of negative stereotypes about people with mental illness was higher among police officers than the general population. Contrary to what was expected, officers meeting criteria for current PTSD endorsed more stigma about mental illness, even when controlling for common demographic predictors of stigma, including gender and knowing someone with a mental illness. Findings have important implications for the training of police officers regarding mental illness.

Keywords Stigma · Help-seeking · Police · PTSD · Trauma

Introduction

Law enforcement is an occupation rooted in exposure to trauma, stress, and possible death on a day-to-day basis. The highstress environment of the job has been linked to a number of physical and mental health issues among police officers. It has been reported that when police officers are exposed to trauma they often do not acknowledge it or try to deal with it on their own (Heffren and Hausdorf 2016). A study in the United Kingdom (UK) found that police officers' susceptibility to post-traumatic stress disorder (PTSD) is four times higher than that of the general population, with a prevalence rate of 13% (Bell and Eski 2015). Police officers are also more likely than the general population to come into contact with people with a mental illness, 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 (Desmarais et al. 2014).

Police Officers—At Risk of Mental Health Issues

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 et al. 2006; Dabney et al. 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 et al. 2006). Countless negative physical and psychological consequences are associated with the stressors of police work. Psychological consequences include suicide, anxiety, PTSD, neurosis, and emotional challenges (Carlan and Nored 2008). In response to work-related stressors, officers often develop avoidant coping strategies which are later exhibited through substance abuse, gambling, and withdrawal from social support networks.

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Avoidant coping can later manifest into long-term consequences that further exacerbate the underlying causes of the problem (Carlan and Nored 2008; Swatt et al. 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 et al. 2016).

Police Culture

The culture among law enforcement is one in which mental health problems, such as 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 do not trust a "weak officer" to back them up in dangerous situations. White et al. (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 and Koch 2015; Wester and Lyubelsky 2005). 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. Deviation from the expected pattern of behavior is not welcome and may be punished (Wester et al. 2010; Wester and 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 et al. 2016).

Mental Health Stigma among Police Officers and their Attitude toward Help-Seeking

Stigma is a major barrier to seeking psychological treatment. Consequently, only 11–30% of people who experience mental health issues seek psychological help (White 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.

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 and 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 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 helpseeking attitudes (Karaffa and Koch 2015). Officers who voluntarily seek mental health services report significantly lower scores on self-stigma (Karaffa and 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).

Stigma among Police Officers

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 report negative expectations and perceptions of police officers, which influences their overall encounter with law enforcement (Desmarais et al. 2014). As first responders, police officers are often tasked with engaging in the work of the mental health professions (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.

In examining the effectiveness of various crisis intervention models in three police departments, Steadman et al. (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 et al. 2000). Previous studies on stigma toward people with mental illness among police officers have found that officers perceive that persons with the label of "schizophrenia" are more dangerous than others without that label (Watson et al. 2004). Furthermore, research indicates that the endorsement of public stigma is associated with both self-stigma and negative attitudes toward seeking help (Karaffa and Koch 2015). However, it is unclear whether police officers hold more negative attitudes than other community members about people with mental illness. Furthermore, it is unclear whether the common experience of trauma and PTSD (itself a mental disorder) among police officers positively or negatively impacts attitudes toward people with mental illness.

Mental health stigma and the barriers it poses to seeking help have earned significant research attention. 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 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. However, it is unclear to what extent experiences of trauma and related symptoms impact helpseeking attitudes and other dimensions of stigma among officers. 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 toward 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.

Current Study

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 toward mentally ill persons, and police officers' attitudes toward 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 police officers. We hypothesized that officers who report high rates of exposure to trauma and would demonstrate increased rates of "likely" PTSD. We further hypothesized that officers would demonstrate more endorsement of stigma than general community members. Furthermore, in line with findings in the general population that personal contact with mental illness is related to lower stigma endorsement (e.g., Parcesepe and Cabassa 2013), we hypothesized that likely PTSD would be associated with less stigma toward community members with mental illness among officers.

Methods

Research Participants

An online study was conducted with persons reporting to be active-duty police officers. Participants were recruited from and compensated via the Oualtrics Research Panel. The authors elected to conduct an online survey rather than to attempt to recruit from a local police department for a number of reasons, including concern that local police departments may not be comfortable with allowing their employees to participate in research due to mistrust of researchers, a desire to recruit a more nationally representative sample, and time constraints. Qualtrics is an online surveying platform that partners with numerous other surveying panels; partners then randomly select respondents for surveys, specifically where respondents are highly likely to meet the requested criteria. Several methodologies are used by Qualtrics to recruit panelists to its online community, including opt-in e-mail, co-registration, enewsletter campaigns, and traditional banner placements, as well as both internal and external affiliate networks. Qualtrics also uses a number of strategies to "authenticate" panel members, including IP address validation and an "honesty detector" algorithm. Qualtrics participants are compensated through independent partners (e.g., via partner-specific rewards, points, gift cards, etc.) and not directly by the investigators. In the present study, specific incentives offered were selected by Qualtrics, not the investigators. Qualtrics panel samples have been successfully used to conduct stigma survey research on targeted groups (e.g., Cheng 2014), and prior research has found Qualtrics panel participants to be generally comparable, though older on average, in comparison to targeted samples recruited through in-person methods (e.g., men who have sex with men; Beymer et al. 2018).

Of 620 persons who responded to the initial Qualtrics invitation, 308 endorsed the screening item and stated they were active-duty police officers (312 indicated they were not activeduty officers, so it is likely that this screening question removed retired officers from the potential sample). Of these 308, 12 were subsequently eliminated as they indicated that they were officers in different areas of law enforcement (such as corrections, parole, or probation), resulting in a sample of 296 active-duty police officers.

Table 1 reports demographic characteristics of the sample. As can be seen in Table 1, the sample was predominantly male (75%), over 40, with a college education. Most participants have been serving as police officers 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. Participants were nearly evenly split between the four primary US regions. Nearly 3/4ths of the sample endorsed knowing someone with a mental illness (most commonly indicated to be a family member), and the great majority also indicated receiving some mental health training. The demographic make-up of the sample was comparable to national data on the composition of police officers, which indicate that police officers are predominantly white males (about 73%) (Reaves 2015).

Table 1Characteristics of sample (N = 296)

	Number	Percent
Gender		
Male	224	75.7
Female	71	24
Race/ethnicity		
White	249	84.1
Black/African American	14	4.7
Native American/	1	0.3
Hispanic/Latino(a)	20	6.8
Asian/Pacific Islander	8	2.7
Bi/Multiracial	2	0.7
Other	2	0.7
Mental health training		
Yes	260	87.8
No	36	12.2
Know someone with mental illne	SS	
Yes	221	74.4
No	72	24.6
Region		
West	50	19.8
Midwest	59	23.4
Northeast	47	18.7
South	73	29.0
Age		
18–30	20	6.8
31–40	64	21.6
41–50	107	36.1
51+	105	35.5
Education		
High school or less	10	3.4
AA or some college	107	36.1
BA	129	43.6
MA or higher	50	16.8
Years on Force		
0–5	29	9.8
5–10	34	11.4
10-15	43	14.5
15+	190	64.2

Procedure

An initial e-mail 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. The first page of the online questionnaire fully explained the purpose of the study and stated to participants that participation was strictly voluntary and that they may choose not to participate or choose to cease participation at any time. Participants in the study remained anonymous. 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.

Measures

Participants were asked to complete an online survey that required approximately 30 min 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.

Trauma Exposure and PTSD Symptoms Trauma exposure was measured using the Brief Trauma Questionnaire (BTQ), Critical Incident History Questionnaire for Police Officer, while PTSD Symptoms were assessed with the and PTSD Checklist for DSM-5. The BTQ is a 10-item self-report scale used to assess traumatic exposure, specifically asking about Criterion A.1. All questions are scored "yes or "no." If one answers yes, then they answer follow-up questions about the event. 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 BTQ was found to have an internal consistency of 0.61. The internal consistency for the Critical Incident History Questionnaire for Police Offices was 0.94.

The PCL-5 consists of 20 items that respondents score on a five-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. A cut-off point of 33 is suggested as an indicator of "probably" PTSD on the PCL-5 (PTSD, 2017). The PCL-5 demonstrated strong internal consistency in the present study (alpha = 0.96).

Negative Stereotypes The Attitudes about Mental Illness and Its Treatment Scale (AMIS) was used to assess negative stereotypes and prejudice (including perceptions of dangerousness) generally toward persons with mental health problems (Kobau et al. 2009). AMIS comprises a total scale (7-items; alpha = 0.73) and two subscales: AMIS 1 (three items about negative stereotypes; alpha = ..76) and AMIS 2 (four items regarding recovery; alpha = 0.66), which include items such as "I believe a person with mental illness is a danger to others" and "I believe a person with mental illness can eventually recover," respectively.

Attributions/Negative Affect The Attribution Questionnaire (AQ-9) consists of nine items reflecting attributions and negative emotions toward a brief vignette about Harry, a man described as having symptoms of schizophrenia (Corrigan et al. 2004). One item reads, "I would feel pity for Harry." Internal consistency for the AQ-9 was low in the present study (alpha = 0.42).

Social Distance The Reported and Intended Behavior Scale (RIBS) includes questions related to future interactions with persons who have mental health problems (Evans-Lacko et al. 2011), such as "In the future, I would be willing to work with someone with a mental health problem." This four-item measure is rated on a five-point scale ($1 = agree \ strongly$, $5 = disagree \ strongly$). The RIBS was found to have good internal consistency in the present study (alpha = 0.84).

Microaggressions The 14-item Mental Illness Microaggressions Scale—Perpetrator Version (MIMS-P; alpha = 0.88) measures subtle stigma toward persons with mental illness, in contrast to more traditional measures of overt discrimination (Gonzales et al. 2015). In addition to the total scale (14 items), the MIMS-P is comprised of three subscales: assumption of inability (5 items, alpha=.81), e.g., "If someone I'm close to told me that they had a mental illness diagnosis, I would try to talk more slowly so that they wouldn't get confused"; patronization (5 items, alpha = .81), e.g., "If someone I'm close to told me that they had a mental illness diagnosis, I would frequently remind them that they need to take their medication"; and fear of mental illness (4 items, alpha = .74), e.g., "If I saw a person who I thought had a mental illness in public, I would be careful in case they 'snap'". Items were rated on a four-point scale (1 = strongly disagree, 4 =strongly agree). The MIMS-P was found to have good overall internal consistency (alpha = 0.87).

Help-Seeking Stigma/Treatment Carryover The Self-Stigma of Seeking Help Scale (SSOSH) is a 10-item scale consisting of items related to feelings of inadequacy and inferiority for seeking mental health treatment (Vogel et al. 2006). Overall, SSOSH assesses threats to one's self-evaluation for seeking help, such as "I would feel inadequate if I went to a therapist for psychological help." The SSOSH had good internal consistency in the current study (alpha = 0.90). The Perceptions of Stigmatization by Others for Seeking Help Scale (PSOSH) assesses the perceived stigma persons anticipate from those they interact with (Vogel et al. 2009). PSOSH items ask respondents if others in their life (e.g., peers, friends, family) would react negatively or "think bad things" about them if they sought counseling. Both scales predict attitudes toward seeking help (Vogel et al. 2009) and actual service utilization (Vogel et al. 2006). Both measures used a similar five-point Likert scale. The PSOSH also demonstrated good internal consistency in the current study (alpha = 0.94).

Results

Trauma Exposure and PTSD

Table 2 reports findings on trauma exposure and experience of PTSD symptoms. Roughly 82% of our sample of officers reported having experienced a traumatic event, which is consistent with estimates for trauma exposure in the general population (Kilpatrick et al. 2013). Furthermore, officers endorsed experiencing an average of three different types of traumatic events on both the BTQ and the CIHQ. The most commonly endorsed traumatic events on the BTQ included witnessing a situation in which someone was seriously injured (endorsed by 78% of the sample), experiencing natural disasters (endorsed by 51% of the sample), and experiencing physical assault (also endorsed by 51% of the sample). The CIHQ, which asks about events experienced specifically in the line of duty, indicated that 33% of the sample endorsed being seriously injured intentionally at least once in the line of duty, while 40% endorsed being present when a fellow officer was seriously injured intentionally and 75% endorsed seeing someone die in the line of duty. Over half (51.5%) of the sample endorsed being threatened with a gun, while 31% endorsed being shot at. These findings are consistent with the view that much of the trauma experienced by police officers is work-related.

Officers in our sample also endorsed experiencing PTSD symptoms, with roughly 12% exceeding the cutoff of 33 on the PCL-5 for "likely" current PTSD. This is significantly higher than the general population in the USA, for which the 12-month prevalence rate is 4.7% (Kilpatrick et al. 2013).

Stigma Measures

Table 3 reports means on the stigma scales in our sample, compared to recent findings using the same scales with a national general population sample recruited through the Qualtrics Research Panel (DeLuca, Vaccaro, Seda, & Yanos, in press).¹ As can be seen in Table 3, with the exception of self-stigma of seeking help, our sample of police officers endorsed significantly more stigma than members of the general population. In particular, police officers demonstrated significantly more endorsement of negative stereotypes, with a mean score nearly 1 standard deviation higher than the general population mean. This indicates that police officers in our sample endorsed more perceptions of dangerousness and unpredictability among people with mental illness than general community members (e.g., only 16.6% *disagreed* with the statement "I believe a person with a mental illness is a danger to

¹ Participants for this study were from the US general population and were recruited through the Qualtrics Research Panel, with stratification based on age cohort, US region, and gender. See Deluca et al. (in press) for further details.

Table 2Trauma exposure insample (N = 296)

	$M\pm SD$	Number	Percent
PCL-5	11.82 ± 15.03		
BTQ	3.39 ± 1.95		
CIHQ	3.15 ± 1.88		
Experienced 1 or more traumatic event		238	82.3
Meet "likely" PTSD		35	12.1

others"). Similarly, with regard to intended social distance, police officers reported more reluctance about maintaining contact with people with mental illness than general community members on the RIBS, with scores approximately a third of a standard deviation higher than the general population. Of note, despite the trend for higher stigma scores in all categories, police officers in our sample did not demonstrate markedly greater concern about the implications of seeking help for one's self-image than members of the general population, with scores on the SSOH similar to what was found in the general population.

Bivariate Predictors of Stigma

We next examined if the experience of "likely PTSD" was related to stigma at the bivariate level, using *t* tests to compare means between the two groups. Table 4 presents differences between participants with and without likely PTSD. As can be seen in Table 4, contrary to what was hypothesized, participants with likely PTSD tended to endorse *more* stigma than other participants on a number of scale, with evidence of more negative attributions (higher scores on the AQ-9), less optimistic attitudes about recovery (higher scores on the AMIS recovery subscale), and more perceived stigma regarding help-seeking (higher scores on both the SSOSH and the PSOSH).

We next used correlation analyses to explore if other background characteristics were associated with the stigma variables at the bivariate level. Based on prior research, we examined whether race/ethnicity (white vs. others), gender, prior personal contact with mental illness (positive endorsement of the item "do you know someone with a mental illness"), education (less than a bachelor's degree vs. bachelor's or higher), and prior mental health training were associated with the stigma variables. We found that male gender was significantly associated with higher scores on PSOH, SSOH, and MIMS-P (indicating more stigma); race other than white was significantly associated with higher scores on the AMIS-Recovery scale, and lower scores on the SSOH (indicting that non-white participants had both less hopeful attitudes about recovery and more positive views about seeking help); prior contact with mental illness was associated with significantly lower scores on the RIBS and the SSOH, indicating less stigma. Both prior mental health training and education were not significantly associated with any of the stigma variables.

Multivariate Predictors of Stigma

We next used regression to determine the predictors of each stigma variable (see Table 5). A separate simultaneous linear regression equation was computed for each dependent variable endorsement of mental health stigma, help-seeking attitudes, and intended behavior toward with a mental illness. Variables included in each equation were gender, race/ethnicity, prior personal contact with people with mental illness, and whether or not they met criteria for PTSD (we excluded prior training since it demonstrated no relationships at the bivariate level). As can be seen in Table 5, the most consistent, and strongest, predictor of stigma variables was likely PTSD, with officers with likely PTSD demonstrating consistently more

Characteristics	Police sample $(n = 296)$	General population $(n = 518)^{a}$	Т	р
AMIS negative stereotypes (range = $1-5$)	3.35 ± 0.77	2.70 ± 0.64	12.92	<.01
AMIS recovery (range = $1-5$)	2.16 ± 0.62	1.97 ± 0.64	4.12	<.01
Attributions (range = $1-7$)	4.06 ± 0.80	3.83 ± 1.38	2.63	<.01
Intended microaggressions (range = $1-5$)	2.33 ± 0.46	2.21 ± 0.40	3.9	<.01
Intended social distance (range = $1-5$)	2.52 ± 0.88	2.22 ± 0.90	4.61	<.01
Self-stigma of seeking help (range = $1-5$)	2.44 ± 0.75	2.40 ± 0.74	.08	ns
Perceived Stigma of Seeking Help (range = $1-5$)	2.08 ± 0.96	1.84 ± 1.01	3.32	<.01

^a Note: From Deluca et al. (In Press). Participants for this study were from the US general population and were recruited through the Qualtrics Research Panel, with stratification based on age cohort, US region, and gender

Table 3Summary of meanstigma scale scores compared togeneral population

	<i>n</i> = 294	
Characteristics	No PTSD (<i>n</i> = 254)	Likely PTSD $(n = 35)$
AMIS negative stereotypes (range = $1-5$)	3.34 ± 0.75	3.4 ± 0.91
*AMIS recovery (range = $1-5$)	2.11 ± 0.58	2.49 ± 0.78
*Attributions (range = 1–7)	4.01 ± 0.75	4.42 ± 0.94
Intended microaggressions (range = $1-5$)	2.31 ± 0.43	2.44 ± 0.58
Intended social distance (range = $1-5$)	2.48 ± 0.87	2.76 ± 0.92
*Self-stigma of seeking help (range = $1-5$)	2.39 ± 0.74	2.75 ± 0.72
* Perceived stigma of seeking help (range = $1-5$)	1.99 ± 0.92	2.59 ± 1.04

negative attitudes toward recovery, more negative attributions, more intended microaggressions, and more negative attitudes toward seeking help, even when controlling for the other variables in the equation. The only variables not significantly predicted by likely PTSD were intended social distance (significantly predicted by prior contact only), and negative stereotypes (not significantly predicted by any variable). Female gender significantly predicted more favorable help-seeking attitudes, while race other than white was associated with less self-stigma toward seeking help.

Discussion

Several important findings emerged from the present study. First, consistent with prior research (Bell and Eski 2015), results from the current study indicated police officers experience high rates of trauma exposure and higher rates of current PTSD than the general population (for which the 12-month prevalence of PTSD is 4.7%; Kilpatrick et al. 2013), with nearly 12% of the sample demonstrating evidence for current PTSD. Further, we found that endorsement of negative stereotypes about people with mental illness was higher among police officers in general than among general population

Table 5 Multivariate predictors of stigma dimensions

members, and that endorsement of other aspects of stigma (including intended social distance) was higher in general among officers than general population members. Furthermore, contrary to what was expected, we found that officers meeting criteria for current PTSD endorsed *more* stigma about mental illness and more negative attitudes about seeking mental health treatment. This finding remained significant even when controlling for common demographic predictors of stigma, including gender and personally 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 oneself decreases the endorsement of stigma (e.g., Coutoure and Penn 2003; Parcesepe and Cabassa 2013). Contrary to this finding, however, the results of this study indicate that officers experiencing PTSD showed more endorsement of stigma than officers without PTSD. One possible explanation for this finding is that these officers were unaware that they met criteria for a mental disorder and therefore did not self-identify in this way, and that some of the negative sentiments they endorsed were related to their ambivalence about the challenging symptoms they experience. As this is a new finding, additional research is needed to examine what about police culture or being an officer

	Likely PTSD (0 = no, 1 = yes)	Prior Personal contact with mental illness (0 = none, 1 = some)	Race/ethnicity (0 = white, 1 = all others)	Gender (0 = female, 1 = male)	
Stigma dimension	Beta	Beta	Beta	Beta	R^2
AMIS negative stereotypes	0.01	-0.09	0.04	-0.02	.01
AMIS recovery	0.21*	-0.09	0.09	-0.02	.06
AQ-9 (attributions)	0.16*	0.08	0.06	-0.0	.05
RIBS (intended social distance)	0.09	-0.27*	0.09	0.08	.10
MIMS-P (intended microaggressions)	0.14*	-0.10	0.03	0.11	.05
SSOSH (self-stigma of seeking help)	0.17*	-0.15*	-0.16*	0.14*	.10
PSOSH (perceived stigma of seeking help)	0.20*	- 0.08	0.07	0.17*	.08

contributes to this finding. The police culture of being emotionally strong and brave may play a role in explaining the discrepancy between the literature and our findings.

The above findings are important in that they point to the need for increased mental health awareness and normalization 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.

The finding that stigma levels were higher among police officers in general is also concerning, especially with regard to negative stereotypes. This significantly higher endorsement of negative stereotypes stigma indicates the need for increased training among officers. Although the majority of our sample endorsed having some mental health training, the quality and nature of the training they received is unknown.

The findings of this study have the potential to impact policy regarding help-seeking among police officers. Given that officers are at greater risk of experiencing PTSD than the general population, but that officers with PTSD are reluctant to seek help, they suggest that police administration may consider changing attitudes 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. Evidence suggests that police officers report experiencing significantly less stress and a greater willingness to use counseling in departments with a supportive climate toward counseling (Carlan and Nored 2008). Studies that have experimented with implementing mandatory counseling found that police officers have a greater awareness of their need for counseling (Carlan and Nored 2008).

Our findings regarding police officers' attitudes and intended behavior were consistent with previous literature in suggesting that officers may be prone to endorse negative stereotypes of people with mental illness. 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," we recommend that comprehensive mental health training to academy recruits is provided.

Limitations and Future Research

A limitation of the present study is that, despite the use of several checks, it is impossible to confirm whether the

participants were in fact active-duty officers. Nevertheless, participants provided detailed responses to a number of the questions regarding types of traumatic experiences encountered and their job titles, so it seems unlikely that participants were pretending to be active-duty police officers. Further, 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, age, and race/ethnicity of police officers in endorsing mental health stigma and help-seeking attitudes and intended behaviors toward individuals with a mental illness. 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 replicability of the results found here would be beneficial. Another intriguing topic 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 versus an offender with PTSD? The literature on police culture indicates that the police culture advocates negative helpseeking attitudes, but there is no research that examines what aspects of the police culture are most associated with negative help-seeking attitudes.

References

- 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. https://doi.org/10.1093/police/pav041
- Berg AM, Hem E, Lau B, Ekeberg O (2006) An exploration of job stress and health in the Norwegian police service: a cross sectional study. J Occup Med Toxicol 1:26
- Beymer MR, Holloway IW, Grov C (2018) Comparing self-reported demographic and sexual behavioral factors among men who have sex with men recruited through mechanical Turk, Qualtrics, and a HIV/STI clinic-based sample: implications for researchers and providers. Arch Sex Behav 47:133–142
- Carlan PE, Nored LS (2008) An examination of officer stress: should police departments implement mandatory counseling? J Police Crim Psychol J Police Crim Psych 23(1):8–15. https://doi.org/10. 1007/s11896-008-9015-x
- Cheng ZH (2014) Asian Americans and European Americans' stigma levels in response to biological and social explanations of depression. Soc Psychiatry Psychiatr Epidemiol 50:767–776. https://doi. org/10.1007/s00127-014-0999-5
- Corrigan P (2004) How stigma interferes with mental health care. Am Psychol 59(7):614–625
- Corrigan PW, Watson AC, Warpinski AC, Gracia G (2004) Stigmatizing Attitudes about Mental Illness and Allocation of Resources to Mental Health Services. Community Mental Health Journal, Vol 40(4), Aug, 2004. pp. 297–307.
- Coutoure SM, Penn DL (2003) Interpersonal contact and the stigma of mental illness: a review of the literature. J Ment Health 12:291–305
- Dabney DA, Copes H, Tewksbury R, Hawk-Tourtelot SR (2013) A qualitative assessment of stress perceptions among members of a

- DeLuca JS, Vaccaro J, Seda J, & Yanos PT (In Press) Political attitudes as predictors of the multiple dimensions of mental health stigma. Int J Soc Psychiatry
- Desmarais SL, Livingston JD, Greaves CL, Johnson KL, Verdun-Jones S, Parent R, Brink J (2014) Police perceptions and contact among people with mental illnesses: comparisons with a general population survey. Psychol Public Policy Law 20(4):431–442. https://doi.org/ 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. Epidemiol Psychiatr Sci 20(03):263–271. https://doi.org/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 Res 229(1–2):120–125
- Heffren C, Hausdorf P (2016) Post-traumatic effects in policing: perceptions, stigmas and help seeking behaviours. Police Pract Res 17(5): 420–433
- Karaffa KM, Koch JM (2015) Stigma, pluralistic ignorance, and attitudes toward seeking mental health services among police officers. Crim Justice Behav 43(6):759–777. https://doi.org/10.1177/ 0093854815613103
- Kilpatrick DG, Resnick HS, Milanak ME, Miller MW, Keyes KM, Friedman MJ (2013) National estimates of exposure to traumatic events and PTSD prevalence using *DSM-IV* and *DSM-5* criteria. J Trauma Stress 26(5):537–547. https://doi.org/10.1002/jts.21848
- 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 Ment Health J 46(2):164–176. https://doi.org/10.1007/ s10597-009-9191-x
- Orsillo SM (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
- Parcesepe AM, Cabassa LJ (2013) Public stigma of mental illness in the United States: a systematic literature review. Adm Policy Ment Health Ment Health Serv Res 40:384–399

- Reaves BA (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
- Stanley IH, Hom MA, Joiner TE (2016) A systematic review of suicidal thoughts and behaviors among police officers, firefighters, EMTs, and paramedics. Clin Psychol Rev 44:25–44. https://doi.org/10. 1016/j.cpr.2015.12.002
- Steadman HJ, Deane MW, Borum R, Morrissey JP (2000) Comparing outcomes of major models of police responses to mental health emergencies. PS Psychiatric Services 51(5):645–649. https://doi. org/10.1176/appi.ps.51.5.645
- Swatt ML, Gibson CL, Piquero NL, (2007) Exploring the utility of general strain theory in explaining problematic alcohol consumption by police officers. J Crime Justice 35 (6):596-611
- Vogel DL, Wade NG, Haake S (2006) Measuring the self-stigma associated with seeking psychological help. J Couns Psychol 53:325–337. https://doi.org/10.1037/0022-0167.53.3.325
- Vogel DL, Wade NG, Ascheman PL (2009) Measuring perceptions of stigmatization by others for seeking psychological help: reliability and validity of a new stigma scale with college students. J Couns Psychol 56:301–308. https://doi.org/10.1037/a0014903
- Watson AC, Corrigan PW, Ottari V (2004) Police officers' attitudes toward and decisions about persons with mental illness. Psychiatr Serv 55:49–53
- Weiss DS, Brunet A, Best SR, Metzler TJ, Liberman A, Pole N et al (2010) Frequency and severity approaches to indexing exposure to trauma: the critical incident history questionnaire for police officers. J Trauma Stress 23(6):734–743. https://doi.org/10.1002/jts.20576
- Wester SR, Lyubelsky J (2005) Supporting the thin blue line: gendersensitive therapy with male police officers. Prof Psychol: Res Pract 36(1):51–58. https://doi.org/10.1037/0735-7028.36.1.51
- Wester SR, Arndt D, Sedivy SK, Arndt L (2010) Male police officers and stigma associated with counseling: the role of anticipated risks, anticipated benefits and gender role conflict. Psychol Men Masculinity 11(4):286–302. https://doi.org/10.1037/a0019108
- White AK, Shrader G, Chamberlain J (2015) Perceptions of law enforcement officers in seeking mental health treatment in a right-to-work state. J Police Crim Psychol J Police Crim Psych 31(2):141–154. https://doi.org/10.1007/s11896-015-9175-4