

OFFICER WELLNESS

February 1, 2021

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I. Executive Summary

Our growing understanding of the adverse effects of exposure to stress and trauma is relevant not just for people who are affected in their private lives, but also people whose exposure is the result of their work – including first responders like police. The topic is obviously relevant for efforts to improve the well-being of the police officers themselves. But it is also potentially relevant for efforts to reduce police misconduct and other forms of adverse police-civilian interactions, given the plausible hypothesis that untreated mental health problems among police officers could contribute to harmful policing outcomes.

This report reviews what is currently known about the potential effects of untreated mental health on adverse policing outcomes, and what might be done to address these problems through mental health interventions as well as broader wellness programs (which can include not just individual counseling but also resilience, self-regulation training, and physical health programs). Much of the evidence here is correlational and so at best suggestive of the key causal connections of primary concern, but where there is good evidence we call that out specifically, using our definition of ‘good evidence’ spelled out elsewhere.¹

- It is clear that people in more stressful jobs in general tend to have higher rates of adverse mental health outcomes like post-traumatic stress disorder (PTSD), depression, and alcohol use. We see this for police officers as well, who have symptoms of PTSD at a rate four times higher than that of other working-age adults, and who also have a suicide rate 82% higher.
- How much of the total number of adverse police-civilian encounters each year are explained by untreated mental health needs among police officers is difficult to determine exactly, but our review of the research suggests it could be large – potentially accounting for up to nearly half (46%) of all police misconduct.
- While the effects of officer wellness interventions are currently not well understood, there is fairly good evidence that mental health interventions can be helpful. Most of the research in this area looks at officer mental health as the key outcome of interest, rather than police misconduct behavior specifically, so by how much existing interventions (if scaled) could change adverse policing outcomes overall remains uncertain.

One of the key challenges in this area moving forward is to figure out how to successfully scale such mental health interventions, and how to structure them in ways that help as many officers as possible who would benefit actually receive them and participate. Telehealth services could be a helpful solution to both challenges. Given the high rates of both untreated mental health problems among police officers, and high rates of police harm (for example police in the

¹ See the Methods for Research Review report for a summary of the criteria used to assess the methodological rigor of existing research and to determine what studies constitute reliable evidence in the present report.

America kill roughly as many civilians in an average week as police in England and Wales kill in a decade²), this would seem to be a high priority area for additional policy attention.

II. Association between Occupational Stress and Mental Health

There is a large body of research showing that in general people who are in more stressful occupations are more likely to have mental health challenges. Risk factors in the workplace include high emotional and cognitive demands, feelings of low workplace control and autonomy, and exposure to traumatic events. We see this among teachers (Travers & Cooper, 2007), medical professionals (Mark & Smith, 2011), correctional officers (Ghaddar et al., 2008), and among members of the military (Pflanz and Sonnek, 2002). We also see it among police.

Beyond the general risk factors for workplace stress, Collins and Gibbs (2003) found that issues tied to the organizational structure of police work specifically, such as work impinging on home life, inadequate support provided by senior officers, being subject to complaints investigation, and a lack of control over workload, all were significant predictors of mental health risk. In addition, policing can expose officers to particularly high rates of traumatic events, consistent with the high rates of exposure to community violence among the residents of the neighborhoods police often serve. One survey of police officers in an urban department found that 60% of male officers and 46% of female officers had experienced five or more traumatic events in the past year (Hartley, 2016). Officers are also sometimes involved in inflicting, not just witnessing violence. Komarovskaya et al. (2011) found that nearly 10% of surveyed officers working at urban departments reported having seriously injured or even killed someone in the line of duty, which (setting aside the obvious and important questions of which of these uses of force were justifiable and which could have been prevented) also has implications for officer mental health.

The result is substantially elevated rates of adverse mental health outcomes observed among police officers. For example:

- In one study officers were administered a screening instrument to measure psychiatric well-being; fully 41% of screened officers were classified as high risk (Collins and Gibbs 2003).
- A study of special force police officers found that particularly harmful to mental health was a perceived discrepancy between work effort and job rewards, which was associated with a seven-fold increase in risk of depression (Garbarino et al. 2013).
- Fully 15% of male officers and 18% of female officers in one study showed indications of PTSD (Harley, 2016), compared with prevalence estimates of 3.5% in the past 12 months in the general population (Kessler et al., 1995), and that experiencing these events were positively correlated with subsequent PTSD and depression.
- Physical health outcomes like cardiovascular risk factors (e.g., hypertension, hyperlipidemia, obesity, and diabetes) are also associated with workplace stress (see Magnavita et al. 2018).

² <https://www.axios.com/people-killed-by-police-by-country-us-shootings-204f3afd-71af-4820-8610-ecd37e04e0a3.html>

- Suicide rates among police officers are 82% higher than among the general working population (Violanti et al. 2013). Thoen et al. (2020) report that 12.4% of surveyed officers thought it “quite” or “very” likely they would attempt suicide one day.

This evidence does not conclusively *prove* that job conditions adversely affect mental health. Many people have some degree of choice over the occupation they wind up in, so in principle at least part of these associations could reflect the tendency of people with certain mental health predispositions to select into particular jobs. But the data are, at the very least, consistent with the hypothesis that the nature of the job of policing itself could put officers at elevated risk for adverse mental health outcomes.

III. Association between Mental Health and Behavioral Misconduct

In the same way that aspects of the job of policing are associated or correlated with adverse mental health outcomes, the data also suggest that adverse mental health outcomes are correlated with adverse policing outcomes. Both of the links in this chain (policing job conditions → mental health, and mental health → policing outcomes) are correlations, not conclusive evidence of causal relationships. But together, as we illustrate below, they suggest that untreated mental health problems among police officers could potentially account for a sizable share of all adverse police-community interactions.

A number of studies find that officers experiencing mental health problems are more likely to engage in misconduct on the job. For example,

- One study found that environmental strain increased risk of using unnecessary force. A one standard deviation increase in strain (the equivalent of going from the average officer’s level of strain into the top quartile) is associated with a 115%-160% increase in odds of unnecessary force (Bishop, 2020).
- Measures of self-control are also correlated with incidents of misconduct, with a one standard deviation decrease in reported self-control associated with a 0.13 standard deviation increase in reports of prior misconduct and a 0.16 standard deviation increase in anticipated future misconduct (Donner et al. 2016).
- Psychological indicators screened at the point of hire also appear to be related to propensity for adverse events related to misconduct. One analysis of measures from a pre-hire psychological screening found that measures of cynicism, antisocial behavior, feelings of persecution, and aberrant experiences were all associated with later behavioral misconduct leading to complaint or involuntary separation (Sellbom, 2007).

These findings among police officers are echoed by the research on people working in occupations that exert similar strains on employees, such as the military. For example one study found that 17% of soldiers hospitalized for a mental disorder were subsequently removed from service due to some form of behavioral misconduct (Hoge et al., 2005). A different study found that war-deployed marines with a PTSD diagnosis were 11.1 times more likely to have a misconduct discharge compared to peers (Highfill-McRoy, 2010).

Job stress and exposure to traumatic events on the job is associated not just with problems at work, but also problems at home and off-duty, such as domestic violence or alcohol abuse. One study found that officers who had PTSD were four times more likely to report using physical violence at home, and officers with dependent drinking habits were eight times more likely to report violence towards an intimate partner or family member (Oehme, 2012). Another study found that more than 40% of surveyed officers reported behaving violently toward their spouse in the past 6 months, with the propensity for domestic violence related to specific stress-related factors such as burnout, authoritarian spillover, alcohol use, and job detachment (Johnson, 2005).

These findings do not show with certainty that addressing mental health challenges among police officers will reduce behavioral misconduct. It is possible that some unmeasured third factor (like personality type) is responsible for both the likelihood of misconduct and mental health, or that the causal arrow runs in the opposite direction than the one we initially think – if, for example, misconduct at work (and whatever punishment is associated with that) leads to adverse mental health, rather than the reverse. But here again the findings are at least consistent with the hypothesis that mental health could be a potential driver of police violence and other misconduct.

The last question we consider is *how* important untreated mental health problems could be for police misconduct. Among all the potential things we might worry about in the field of policing, is officer wellness a first-order concern? Because the evidence on the scope of the problem is correlational, and likely overstates the causal contribution of mental health problems to police misconduct, our illustrative correlations should be considered an upper bound. But that upper bound calculation suggests mental health could be a major contributor to police misconduct:

- Police officers experience PTSD at a rate of approximately 15% (Hartley, 2016), compared to a rate of 3.5% observed among the general population (Kessler, 1995). The Bureau of Justice estimates that 443,663 citizens experienced excessive force in their most recent contact with police officers in 2018 (Harrell & Davis, 2018). Assuming a causal link between PTSD and misconduct, the hazard ratio of 11.1 identified by Highfill-McRoy et al. implies that 204,897 of these cases of misconduct are due to police officers having PTSD at a higher rate than the general population, which accounts for 46% of all cases of perceived excessive force by citizens.
- Oehme et al. (2012) found that officers with PTSD were four times more likely to engage in physical violence against an intimate partner or family member, and 28.6% of surveyed officers self-reported engaging in violence at home. Applying this rate to the total number of officers nationwide in 2019³ implies that 199,398 of the 697,195 total officers have engaged in domestic violence. Again assuming a causal link between PTSD and domestic violence, these estimates would indicate that 47,443 of officers engaged in violence due to PTSD, accounting for 24% of all officers who used physical violence at home.

³ See FBI Crime in the U.S. 2019 Report, Table 74: <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-74>.

IV. Effects of Wellness Programming

Police departments have implemented a variety of programs aimed at strengthening facets of both physical and mental health. While the impacts of physical health and fitness programs are not well understood, there is growing consensus that mental health interventions such as resilience training and individual counseling sessions can improve outcomes related to mental wellness in police officers. But few studies to date have examined the effects of these mental health supports on frequency of police misconduct or other public safety outcomes.

Wellness programs aimed at directly improving officers' physical health have not been rigorously evaluated through experimental studies. Still, there is widespread recognition that that physical fitness plays an important role in officers' job performance and ability to recover from work-related injuries. A joint report by the International Association of Chiefs of Police and the USDOJ Bureau of Justice Assistance found that officers classified as overweight or obese respectively missed 1.5 times and 3.5 times as many workdays following injury compared to officers reporting a healthy weight (IACP, 2013). A systematic review of studies on physical fitness in police officers found similar fitness levels to the general population despite the physical demands of the job (Marins et al. 2019).

A more robust body of empirical evidence points toward direct health benefits from mental health and wellness programs for police officers and other occupations. For example, a handful of randomized⁴ evaluation studies have found improvements in self-reported measures of mental health and wellness among officers following engagement with training on techniques for resilience, mindfulness, and self-regulation:

- A randomized evaluation of one resilience and self-regulation training program found statistically significant reductions in stress, negative emotions, depression, and increased peacefulness and vitality in trainees compared to the control group (McCarty & Atkinson, 2012).
- Another randomized study found that officers who participated in training on coping skills during stressful situations, cognitive restructuring, and relaxation techniques reported improvements in their own perceived level of health, perceived level of stress, and self-efficacy in dealing with criticism-prone situations (Garner, 2008).
- In another randomized study, training on relaxation techniques and adaptive coping skills during critical incidents led to fewer self-reported physiological health problems, with treated officers 4.1 times more likely to have improved scores on a general health survey post-intervention (Arnetz et al., 2013).
- One randomized trial of a resilience training program found no difference between controls and trainees, but the small sample size in this study results in a large 95% confidence interval around the estimated treatment effect. The interval does not rule out an improvement in perceived stress scores as large as 0.8 standard deviations in the treated group (Ramey, 2017).

⁴ Several studies additionally provide before-after analysis of officers who completed mindfulness-based resilience training, finding improvements in self-reported mental health outcomes in these officers (Christopher et al., 2015; Bergman et al., 2016; Krick & Felfe, 2019). We emphasize that these study designs cannot disentangle the effects of the intervention from other factors as discussed in the Methods for Research Review report.

In addition to training programs aimed at improving resilience and mindfulness, police departments commonly make individual counseling and therapy sessions available to officers through employee assistance programs. Several studies suggest the effectiveness of individual therapy in improving mental health outcomes:

- One randomized trial found benefits from brief cognitive behavioral therapy (CBT) on mental health outcomes in the military (which is obviously different from policing, but potentially relevant), observing that CBT reduced suicide attempts by 60% compared to soldiers treated with non-CBT psychotherapy approaches (Rudd et al. 2015).
- Another randomized study of trauma-focused CBT in the general population found that both short-term, intensive CBT and a longer, weekly CBT sessions were effective in treating PTSD, with 73% and 77% of treated patients respectively recovering from PTSD compared to 7% in the control group (Ehlers et al., 2014).

Other types of wellness programming may also be effective among police officers but are supported by smaller bodies of empirical evidence. Ireland et al. (2006) found that officers randomly assigned to a writing-based intervention, in which officers wrote for 15 minutes a day on how they planned to address work-related emotions, experienced less stress, anxiety, and depression in comparison to controls. This finding aligns with other evidence suggesting that expressive writing can reduce symptoms of depression and persistent rumination in depression-vulnerable groups (Gortner et al., 2006). In a cross-sectional study, Watson & Andrews (2018) found that groups undergoing a trauma risk management program reported lower levels of PTSD, were less stigmatized towards mental health challenges, and perceived fewer barriers to help-seeking than those not participating in the program.

Despite this growing body of evidence suggesting mental health benefits in police officers, few evaluations of officer wellness programs have considered impacts of these programs on public safety outcomes. Owens et al. (2018) provide the most promising evidence to date, examining the effectiveness of guided conversations with a supervisor on future policing outcomes through a randomized trial conducted at the Seattle police department. In these conversations, supervisors applied principles of procedural justice and officers were asked to consider their thought processes during a recent encounter with a public citizen. Officers were subsequently 12% less likely to resolve incidents with an arrest and between 16 to 50% less likely to be involved in use of force incidents. Christopher et al. (2020) describe an ongoing randomized trial that will assess effects of mindfulness-based resilience training on three sets of outcomes: (1) self-reported mental health indicators, (2) physiological measures of health, and (3) behavioral infractions such as excessive uses of force. These two studies are encouraging steps towards understanding the potential public safety benefits of wellness interventions, but more empirical evidence is needed to help departments design and implement programs that reduce risk of misconduct or other public harms.

V. Conclusion

There is encouraging evidence that treating mental conditions can improve health outcomes in officers who engage with supports like resilience training or individual therapy. Stronger

evidence is still needed to directly link improvements in officer mental health to critical policing outcomes, such as rates of excessive force or other forms of police misconduct. Still, observed associations between officer mental health and the propensity for unnecessary force suggest there is significant potential for these interventions to benefit communities suffering from high levels of police violence.

A significant remaining challenge in this area is to identify how best to scale up effective interventions and maximize reach among officers who would benefit from mental health support. While 16.1% of all adults in the U.S. received mental health services in some form in 2019 (SAMHSA, 2019), one survey found that only 4% of all police officers and 17% of officers reporting symptoms of mental illness actually seek mental care (Jetelina, 2020). Research is needed to understand how to better engage officers who are experiencing these symptoms. Complicating the delivery of mental health services is a widespread stigma among officers against seeking treatment for mental health issues. Telehealth services are one promising solution; Shigekawa et al. (2018) found agreement in published literature that these services are as effective as in-person interventions for assessment and treatment of a variety of mental health conditions. Best practices for building trust and rapport are vitally important in the context of telehealth, such as connecting patients with a counselor who understands the unique challenges of police work (Papazoglou & Tuttle, 2018). Remote care allows officers to seek treatment in way that is less visible to co-workers and supervisors and may be a cost-effective way for departments to scale up the supports they provide to officers.

Police officers face a variety of work-related stressors in the course of duty as well as widespread rates of untreated mental health issues. Wellness interventions can benefit not only officers and their families, but also the communities they serve, by helping officers safely cope with the complexities of the job. Looking forward, additional work is needed to understand the impacts of different support alternatives and how to deliver these supports to all officers who need it.

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