More Than Just a Scratch: A Scoping Review on Physical and Psychological Consequences of Violence against Police

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Abstract

Violence against police is a reality for many officers. Despite growing concerns over the rise in violence against police and the serious individual and societal repercussions associated with it, a comprehensive overview of the psychological and physical consequences of verbal and physical violence against police remains elusive. By performing a scoping review (n = 21) of studies and reports identified via database searches (Web of Science and Google Scholar), reference mining, and purposive sampling, and published between 2010 and 2023, this article is the first of its kind to map psychological and physical consequences of violence against police, as well as risk and protective factors that respectively increase and decrease adverse consequences. Results indicate that officers experience primary victimization by a range of different adverse consequences, but also deal with secondary victimization. The literature has come to a standstill due to lack of (recent) studies and a lack of diversity on how consequences of violence against police are studied. We argue that this lack of academic attention might be influenced by predominant societal perspectives and officers' perceived victim status, and discuss the implications for police, policymakers, and research.

Keywords: violence against police, aggression against police, police victim, law enforcement, injury, ideal victim

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Among all public service workers, police officers encounter the most violence in their line of duty (Bergman et al., 2013). This assertion is further supported by statistics which reveal that in 2019, over 56,000 police officers in the United States were assaulted, corresponding to more than 153 assaults per day. Furthermore, nearly 50 police officers lost their lives that year due to felonious incidents (FBI, 2019). Similarly, in Australia, approximately 2,500 officers were assaulted in 2019, corresponding to roughly seven assaults per day (Police Association of NSW, 2020). In Canada, there have been several instances of police officers being killed in 2022, and authorities have expressed concern over the disturbing rise in violence against police nationwide (Casaletto & Yazdani, 2022). These trends are not limited to North America and Australia, as the European Confederation of Police has also warned of a significant rise in violence against police across Europe, noting that this increase represents "the most serious acts of violence against them in many years" (EuroCOP, 2022; Jacques, 2021). Nevertheless, considering the substantial amount of unreported cases, these figures likely underestimate the true scale of violence experienced by police officers (DJG, 2022), emphasizing the unfortunate reality that violence is a prevalent risk in the police profession.

The physical and psychological consequences of violence experienced by police officers are significant. Physical injuries can range from minor bruises to severe fractures, bite wounds, cuts, abrasions, and trauma to the face, head, or neck (Leino, 2013; Smith et al., 2020). Psychological consequences may manifest as poor psychological health, psychological stress, and post-traumatic stress disorder (PTSD¹) (Leino, 2013; Maguen et al., 2009; VSOA, 2020). These consequences may negatively influence work performance, as police officers may avoid interacting with certain audiences (VSOA, 2020), or become more assertive during

citizen interactions after experiencing violence (Ellrich & Baier, 2016; Zietlow, 2016). Furthermore, violence against police officers leads to significant societal costs regarding medical expenses and absenteeism (Covington et al., 2014; Bierie, 2017; Goormans et al., 2022). In the long term, violence against police can damage trust in the police and negatively influence police-citizen relationships (Hickman et al., 2021; Goormans et al., 2022).

To date, a comprehensive overview of the physical and psychological consequences of violence against police officers is still lacking. Therefore, a scoping review is essential to provide an exhaustive overview of the existing research literature on the psychological and physical consequences of both verbal and physical violence against police officers. Through the scoping review, we aim to achieve the following objectives: (1) to identify the current state of the art of quantitative and qualitative research in this area; (2) to highlight any gaps in the literature; and (3) to discuss the implications of our findings for future research, policy, and practice (Arksey & O'Malley, 2005; Munn et al., 2018; Peters et al., 2017, 2015a, 2015b).

Method

A scoping review is a systematic approach that involves searching, selecting, and synthesizing literature in order to map the current state of the art of a particular research domain and identify research gaps (Colquhoun et al., 2014, p. 5). To achieve this, we employed the frameworks of Arksey and O'Malley (2005), Levac et al. (2010), and Verhage and Boels (2015). Our research question is: What is known about the physical and psychological consequences of violence against police? To ensure the quality and relevance of the studies included, we applied several inclusion and exclusion criteria:

 Study design and topic: we included empirical and original studies (including literature reviews) that focused on the physical and/or psychological consequences for police officers as a result of experiencing violence against them.

- 2. Methods: we included quantitative, qualitative, and mixed method studies.
- Language: we only included studies in Dutch and English, as these were the language proficiencies of the authors.
- 4. Time frame: to ensure that our review included the most recent research, we limited our search to studies published between 2010 and April 2023.
- 5. Medium: to maintain the scientific rigor of our review, we excluded dissertations, nonscientific studies, and non-scientific reports from our analysis.

Our search strategy included database searches, reference mining, and purposive sampling. After an initial exploratory search to finalize key words and search strings, we conducted database searches on Web of Science (WoS) and Google Scholar (GS) with the search terms and strings presented in Table 1. WoS was selected because it is considered as one of the most important and multidisciplinary databases (Martín-Martín et al., 2018). Since GS uses Boolean operators in an inconsistent manner (Halevi et al., 2017), we decided to use different combinations of search terms. In total, the database searches resulted in 1,151 hits, as illustrated by Figure 1.

[Table 1]

To identify relevant studies, a multi-step screening process was used. Initially, the second author screened the 1,151 hits on title and abstract, which resulted in a longlist of 40 studies. The full-text of the longlisted studies was then evaluated by the first and second author, which resulted in a preliminary shortlist of 11 studies. The interrater agreement between the two authors for the final classification of studies to be included in the review² was almost perfect, with Cohen's Kappa = 0.88, in accordance with established guidelines (Landis & Koch, 1977). Additional studies were included through reference mining, with the first author identifying six additional studies based on the references cited in the shortlisted studies (Arksey & O'Malley, 2005; Feys, 2022; Peters et al., 2015a). Four further studies

were included by the first author through purposive sampling, which is a recognized method for ensuring broad coverage of the literature (Ames et al., 2019; Dixon-Woods et al., 2006). Overall, the final shortlist comprised a total of 21 studies, which was deemed to be sufficient for achieving saturation with regard to study identification in the scoping review.

[Figure 1]

We utilized Feys' (2022) framework to evaluate the methodological quality of the 21 studies included. This framework assesses six items that studies should report (methodology, selection of participants, number of participants, triangulation of findings, analyses, limitations of the study). The first author conducted the assessment of all 21 studies, while the second author assessed a random sample of eight studies. The authors' final classifications showed high interrater reliability, with agreement on seven out of eight classifications. Although quality assessments are not typically included in scoping reviews (Arksey and O'Malley, 2005; Levac et al., 2010; Feys, 2022; Peters et al., 2015a, 2015b), we included them to provide recommendations for practice, policy, and future research (Daudt et al., 2013; Colquhoun et al., 2014; Khalil et al., 2016; Peters et al., 2015b). To ensure that all insights were considered, we assigned weights to studies without excluding those of lower quality (Feys & Verhage, 2018; Hannes, 2011). The weights were based on the assessment of six items related to methodological quality, as indicated by Feys (2022). The higher the total score on all six items, the higher the allocated weight. As such, studies with higher weights evidenced higher methodological quality (Feys, 2022). Each weight per study can be found in Table 2. We ranked the final shortlisted studies based on the allocated weights and conducted content analysis from higher to lower weight. Studies that scored a higher weight were thus prioritized in the analyses.

We conducted two types of analyses to synthesize the findings of the included studies. First, a numerical summary of the results is presented in Table 2. Second, we conducted a thematic analysis to identify key concepts and themes, which is presented in Figures 2, 3, and 4 (physical violence) and Figure 5 (verbal violence). To perform the thematic analysis, we used the software Nvivo to facilitate the extraction of key concepts and the development of descriptive themes. Our analysis followed a process of iterative refinement and constant comparison with the content of the studies (Thomas & Harden, 2008). We compared the identified concepts with each other to identify overlaps, contradictions, and similarities, and to develop overarching themes and codes. Saturation was reached when no new themes emerged, and all content was covered by the developed codes.

Results

Description of Studies

Table 2 summarizes the studies we included in this review. Studies were conducted across nine countries. The nature of the studies varied, with 14 being quantitative (Beagley et al., 2018; Brandl & Stroshine, 2012; Brewin et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2016, 2017a, 2017b; Leino, 2013; Leino et al., 2011, 2012; Rentmeesters & Hermans, 2023; Santa Maria et al., 2018), six being qualitative (ARQ, 2021; Dawes et al., 2019; Evans et al., 2013; Gilleir, 2010; Laureys, 2014; Zietlow, 2016), and one study using mixed methods (Houdmont et al., 2021). All studies were original/empirical and no literature reviews were identified. The majority of studies (n = 15) used primary data (ARQ, 2021; Brewin et al., 2020; Dang et al., 2016; Dawes et al., 2019; Evans et al., 2013; Gilleir, 2010; Laureys, 2014; Leino, 2013; Leino et al., 2017a; Gilleir, 2010; Houdmont et al., 2021; Laureys, 2014; Leino, 2013; Leino et al., 2011, 2012; Rentmeesters & Hermans, 2023; Santa Maria et al., 2018; Zietlow, 2016). Only one study (n = 1) did not involve a (sub)sample of police officers (ARQ, 2021). Qualitative analyses, where present, utilized thematic or content analysis (Evans et al., 2013; Zietlow, 2016). Regression analyses were the most commonly used quantitative analysis (n = 12) (Brewin et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoff

2016, 2017b, 2017a; Houdmont et al., 2021; Leino, 2013; Leino et al., 2011, 2012;

Rentmeesters & Hermans, 2023). Data collection for most of the quantitative studies (n = 14) was conducted through surveys (Beagley et al., 2018; Brewin et al., 2020; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2016, 2017b, 2017a; Houdmont et al., 2021; Leino, 2013; Leino et al., 2011, 2012; Rentmeesters & Hermans, 2023; Santa Maria et al., 2018), while one study used injury files (n = 1) (Brandl & Stroshine, 2012). All qualitative studies used interviews (ARQ, 2021; Dawes et al., 2019; Evans et al., 2013; Gilleir, 2010; Houdmont et al., 2021; Laureys, 2014; Zietlow, 2016), and one research report also used focus groups with respondents on policy, care, and management level (ARQ, 2021).

[Table 2]

The majority of studies (n = 13) focused on the nature and extent of psychological consequences of violence, assaults, attacks, or victimization of police officers. The selected academic articles in this category were published between 2011 to 2018 (n = 12) (Beagley et al., 2018; Dang et al., 2016; Ellrich & Baier, 2016, 2017; Geoffrion et al., 2016, 2017b, 2017a; Laureys, 2014; Leino, 2013; Leino et al., 2011, 2012; Zietlow, 2016), while one research report was conducted in 2019 (n = 1) (Dawes et al., 2019). The other studies (n = 8) explored wider issues, including policing, police stressors, and traumatic events. Notably, only a small section of these studies addressed violence against police (ARQ, 2021; Brandl & Stroshine, 2012; Brewin et al., 2020; Evans et al., 2013; Gilleir, 2010; Houdmont et al., 2021; Rentmeesters & Hermans, 2023; Santa Maria et al., 2018).

Gender and/or age characteristics of the sample were reported in the majority of studies (n = 17) (Beagley et al., 2018; Brewin et al., 2020; Dang et al., 2016; Dawes et al., 2019; Ellrich & Baier, 2016, 2017; Evans et al., 2013; Geoffrion et al., 2016, 2017b, 2017a; Houdmont et al., 2021; Leino, 2013; Leino et al., 2011, 2012; Rentmeesters & Hermans, 2023; Santa Maria et al., 2018; Zietlow, 2016), whereas race/ethnicity was only reported by

two studies (Beagley et al., 2018; Evans et al., 2013). All 17 studies focused primarily on male officers, with participants belonging to different age groups. The two studies that reported ethnicity/race mainly included white male officers as participants. Other items denoting diversity such as socioeconomic status, religion, and cultural backgrounds were not researched or reported.

Physical Violence

Police officers are more likely to encounter physical violence compared to other security personnel, such as security guards (Leino, 2013). This physical violence can take various forms, including pushing, hitting, kicking, and may involve weapons or objects (Ellrich & Baier, 2016). Assaults can be intentional or unintentional (Dang et al., 2016; Ellrich & Baier, 2017) and can range from mild to severe (Ellrich & Baier, 2016). Mild unarmed physical assaults are the most common, while weapon-related assaults are less frequent (Ellrich & Baier, 2016; Leino, 2013). As a result of physical violence, officers may experience work incapacity ranging from approximately three and a half days for most officers to more than seven days for others (Dang et al., 2016; Ellrich & Baier, 2017).

A compilation of adverse physical consequences.

Police officers who experience violent victimization may require medical attention for physical injuries (Brandl & Stroshine, 2012; Leino, 2013; Leino et al., 2012). The most common injuries include bruises or contusions to hands and arms, while injuries to the head, neck, shoulder, or back are less frequent (Brandl & Stroshine, 2012; Dang et al., 2016; Ellrich & Baier, 2016). Injuries to these areas can result in longer work incapacity or desk duty in the future (Ellrich & Baier, 2016) and may also exacerbate psychological symptoms indicative of disturbance (Dang et al., 2016).

A compilation of adverse psychological consequences.

Psychological symptoms indicative of disturbances. All descriptions of adverse consequences are highlighted in Figure 2. Dang et al. (2016) found that police officers do not report more somatic disturbances³ after experiencing violence compared to security guards and public transport workers. However, in cases where officers do report somatic disturbances, it is often related to their work incapacity (Dang et al., 2016). In addition to this, studies show that police officers are prone to experiencing post-traumatic stress (PTS) following violent victimization (Ellrich & Baier, 2016, 2017; Laureys, 2014; Zietlow, 2016). Both female and male officers are at risk of developing PTS (Ellrich & Baier, 2017), although female officers may be more vulnerable, particularly those with high levels of empathy (Beagley et al., 2018; Geoffrion et al., 2017a). It has been estimated that approximately 5% of PTS cases develop into PTSD (Ellrich & Baier, 2016; Rentmeesters & Hermans, 2023).

Psychological burdens. Police officers who have experienced violence can suffer from a range of psychological burdens. These may include negative self-image (Ellrich & Baier, 2016), increased emotions of vulnerability (Evans et al., 2013), guilt, and shame (Laureys, 2014), as well as overthinking what happened (Laureys, 2014), excessive worry, and uncontrollable crying (Zietlow, 2016). Psychological distress⁴ may also be present, especially when injuries are involved (Leino, 2013; Leino et al., 2012) or when the attack involved a deadly weapon (Leino et al., 2011). In particular, female officers who score high on empathy may be more likely to experience depressive reactions (Beagley et al., 2018) as part of psychological distress.

Police officers can experience various types of fear after experiencing violence (Dang et al., 2016), such as fear of backup not arriving on time, fear of being alone during a violent event (Houdmont et al., 2021), fear of the offender, fear of returning to work (Dang et al., 2016), or fear of being judged by fellow officers (Geoffrion et al., 2017b). They may also feel a decreased sense of safety and a heightened fear of re-victimization, which may result in feelings of insecurity (Ellrich & Baier, 2016; Laureys, 2014; Leino, 2013; Leino et al., 2011, 2012; Zietlow, 2016). In fact, officers who have been victimized or injured are more likely to believe that they will experience future victimization compared to colleagues who have not experienced such incidents (Ellrich & Baier, 2016; Leino, 2013).

Victimized officers can experience disturbed sleep (Ellrich & Baier, 2016; Laureys, 2014; Zietlow, 2016), which is associated with longer work incapacity (Ellrich & Baier, 2016). The impact of victimization can also extend to the officer's private life, with potential for tension and communication difficulties (Dawes et al., 2019; Ellrich & Baier, 2016; Evans et al., 2013; Laureys, 2014; Zietlow, 2016). Some officers may turn to increased alcohol consumption to cope with (di)stress (Dang et al., 2016; Laureys, 2014; Zietlow, 2016), particularly those who sustained physical injuries (Leino, 2013; Leino et al., 2012). Additionally, some officers may minimize or normalize violence after experiencing it or witnessing it against their colleagues (Geoffrion et al., 2016, 2017a).

[Figure 2]

Risk factors that increase adverse psychological consequences.

Individual characteristics of the police officer. As depicted in Figure 3, various demographic factors of the victimized police officer are related to increased distress and injury. For example, female and older officers (45+ years) are more susceptible to experiencing distress (Leino et al., 2011). On the other hand, middle-aged officers (35-44 years) with more work experience (4-9 years) are more likely to sustain injuries and require medical intervention (Leino et al., 2012). Additionally, officers who have experienced victimization in previous violent events are at a greater risk of developing distress, fear, and PTS (Dang et al., 2016; Ellrich & Baier, 2017; Leino et al., 2011).

Characteristics of the violent event. The perceived offender's hostile intentions towards police, such as anti-police motive, animosity, or an ambushed attack⁵, are associated with a higher risk of PTS(D) for police officers (Ellrich & Baier, 2016, 2017). The use of weapons, firearms, or hazardous objects by the offender further increases the risk of PTSD (Ellrich & Baier, 2016; Rentmeesters & Hermans, 2023). Additionally, female officers who perceive their own behavior as incorrect are at a higher risk of experiencing PTS symptoms than male officers who perceive their own behavior as incorrect as incorrect (Ellrich & Baier, 2017). Legal consequences, such as a criminal investigation or disciplinary hearing, also increase the likelihood of PTSD and stress levels for both male and female officers (Ellrich & Baier, 2016, 2017). Furthermore, police officers who require medical care are more likely to experience psychological distress (Dang et al., 2016) or PTS (Geoffrion et al., 2017a). Also, female officers who experience a work incapacity of seven days or more are at a higher risk of PTS than their male colleagues (Ellrich & Baier, 2017).

Unsupportive interactions within the police organization. The psychological effects experienced by police officers can be worsened by interactions with their organization. When superiors in positions of authority lack empathy and focus on officers' mistakes, it can increase stress and insecurity. This type of situation is viewed negatively by victimized officers (Laureys, 2014; Zietlow, 2016). If officers perceive a lack of debriefing, lack of training on how to handle and de-escalate possibly violent events, and limited access to formal support such as counseling from their organization, it may lead to increased alcohol use (Leino, 2013; Zietlow, 2016). Furthermore, police culture that stigmatizes victimization or portrays officers as weak for seeking help can lead to bottled-up emotions, increased stress, and feelings of alienation, anger, or resentment (Dawes et al., 2019; Laureys, 2014; Zietlow, 2016). Moreover, if officers feel that it is taboo to complain about victimization, they may be

less likely to seek help and experience more negative consequences (Geoffrion et al., 2016, 2017a).

Unsupportive interactions within the legal system. Police officers may feel unsupported by the criminal justice system due to a number of reasons. For example, according to Laureys (2014), some officers report that prosecutors or lawyers react indifferently to violent victimization, viewing it as a routine part of police work. This lack of recognition often amplifies the psychological burden and a sense of impunity. Moreover, if the prosecutor's office closes the case without any consequences or the compensation for the settlement fails, these feelings are further intensified (Laureys, 2014).

[Figure 3]

Protective factors that decrease adverse psychological consequences.

Coping strategies of the police officer. As highlighted in Figure 4, police officers may adopt various coping strategies to mitigate the adverse psychological effects they may experience (Geoffrion et al., 2017a). Some officers opt for convalescent leave or changing jobs within the police organization, while others choose to return to work immediately after a traumatic event (Dang et al., 2016; Dawes et al., 2019; Zietlow, 2016). In addition to seeking therapy, police officers also engage in cognitive processes such as reflection, putting the event into perspective, or focusing on positive aspects of their experience (Laureys, 2014; Zietlow, 2016).

Supportive interactions. Supportive interactions from within one's own network are key (Zietlow, 2016). Colleagues who offer support, empathy, and their availability are perceived positively by victimized officers (Dawes et al., 2019; Geoffrion et al., 2017a; Laureys, 2014; Leino, 2013; Zietlow, 2016). Additionally, venting to family and friends about the experience is also viewed as beneficial (Laureys, 2014; Zietlow, 2016).

Police organization. Studies show that police organizations can mitigate the negative psychological impact on victimized officers through various initiatives. For example, preparatory and follow-up training on how to handle and de-escalate possibly violent events may reduce PTS symptoms for female police officers (Ellrich & Baier, 2017). Additionally, administrative support, such as guidance through administrative procedures and the progress of their case (Laureys, 2014), as well as collegial support systems driven by fellow officers trained in supporting victims of violence are viewed positively by police officers (ARQ, 2021; Dawes et al., 2019; Leino, 2013). Officers also benefit from counseling by therapists or confidants within the police organization, as well as from support of hierarchical superiors by checking in, being involved, or advocating for the officer (Ellrich & Baier, 2017; Laureys, 2014; Zietlow, 2016).

[Figure 4]

Verbal Violence

Verbal insults and threats are common forms of verbal violence experienced by police officers, while threats with a weapon or object are less prevalent (Brewin et al., 2020; Ellrich & Baier, 2016; Leino, 2013). Brewin et al. (2020) found that unlike physical violence, exposure to verbal violence is not associated with PTSD. However, as seen in Figure 5, the emotional toll of experiencing verbal violence can result in feelings of emotional exhaustion, as well as depression, anxiety, and other psychological distress (Santa Maria et al., 2018). Moreover, being threatened can also affect an officer's private life (Gilleir, 2010). Nevertheless, protective factors such as changing jobs or workplaces within the police organization and police training on coping strategies can mitigate negative consequences (Gilleir, 2010).

[Figure 5]

Serious Consequences yet a Standstill of the Literature

Despite the prevalence of violence directed at officers, systematic literature reviews exploring its impact have been scarce. This scoping review is the first to provide a comprehensive overview of the physical and psychological consequences of violence against police. It highlights the wide range of negative outcomes that officers may experience as a result of verbal and physical violence, as well as the protective and risk factors that are involved.

The physical impact of violence against police officers may result in trauma to their hands and arms, as well as injuries to the head, neck, shoulder, or back, which may require medical intervention or lead to work incapacity. Moreover, physical violence can lead to psychological symptoms indicative of disturbances, including somatic disturbances and PTS(D), as well as psychological burden such as fear, negative self-image, increased emotions and behaviors, psychological distress, disturbed sleep, tension in private life, alcohol consumption, and normalization of violence. Effective coping strategies, police organizational support, including administrative aid and training, and supportive interactions with colleagues, family, and friends can act as protective factors against negative psychological consequences. However, certain factors increase the risk of adverse consequences, including individual characteristics such as gender and age, unsupportive interactions within the police organization and legal system, and characteristics of the violent event itself such as the offender's intention or perception of one's own behavior. Verbal violence can result in emotional exhaustion, psychological distress, and strain on the officer's private life. Changing jobs within the police organization and training on how to cope with or recognize distress can serve as protective factors against adverse psychological consequences.

Despite the alarming prevalence of violence against police (as discussed in the introduction), the study of its consequences on police officers has remained largely stagnant.

This is due to two key factors: a paucity of recent research and a lack of diversity in the way the topic has been investigated. Only 13 studies examined the nature and extent of the consequences of violence against police, with academic articles covering a narrow timeframe of 2011 to 2018. These studies were geographically confined to nine countries (Australia, Belgium, Canada, Finland, France, Germany, Netherlands, United Kingdom, United States), indicating that this topic has not been studied yet in other (non-Western) countries. Furthermore, the current literature on consequences of violence against police lacks diversity, failing to explore a wider range of consequences, risk and protective factors that manifest on different domains. By focusing mostly on the effects of physical violence, studies have overlooked the importance of verbal violence, which has a higher prevalence rate (Brewin et al., 2020; Ellrich & Baier, 2017; Leino et al., 2011). Furthermore, the studies on psychological consequences have mainly concentrated on a limited number of consequences, such as PTS(D) or psychological distress, overlooking other potential consequences, such as impaired self-image and normalization of violence. Similarly, little attention has been given to the increased risk of adverse consequences resulting from previous victimization, violent event characteristics, or legal system interactions, as well as the protective role of police organization initiatives or other supportive interactions.

To broaden the scope, it would be useful to look at studies of violence against other professionals, such as healthcare workers, which demonstrate a range of consequences that may also apply to police officers, including implications on job satisfaction and work motivation (Baydin & Erenler, 2014; Koeppen & Hopkins, 2021; Vento et al., 2020), selfblame and self-doubt (Brophy et al., 2017), hypervigilance (Antão et al., 2020; Avander et al., 2016), burnout (Vento et al., 2020), and anxiety (Brais et al., 2022).

Additionally, studies in the general population suggest that both anticipation and recovery/adaptation effects on psychological consequences are at stake after violent

victimization (Janssen et al., 2021). Both could also be present within violence against police officers, yet these have not been explored. Another aspect that deserves attention is the psychological consequences of witnessing violence against colleagues, which may trigger feelings of looming victimization risk. In fact, it is important to note that almost all studies rely on direct victimization, whereas indirect victimization by witnessing violence against colleagues may also lead to serious adverse psychological consequences. However, indirect victimization has only been explored by Geoffrion et al. (2016, 2017a, 2017b) in research on the influence of normalization.

Furthermore, of all diversity-related items, only age has been addressed in samples to study consequences of violence against police. Limited attention has been given to other items of diversity, since studies have predominantly included white male officers in their samples. This predominance raises concerns about the generalizability of findings on the consequences of violence against police to other samples (e.g., officers of various ethnicities, cultural backgrounds, gender identities, religions, socioeconomic statuses). Future studies could therefore recruit more diverse samples of police officers and report all diversity-related items in their research.

Implications for Practice, Policy, and Research

The lack of recent studies and the lack of diversity on how consequences of violence against police are studied, raise important questions about the current state of research and societal attitudes towards this issue. Our analysis leads us to question whether the lack of attention given to this topic in academia is influenced by prevailing societal perspectives and the perceived victim status of police officers. We contend that these factors may have implications for how primary and secondary victimization of police officers is conceptualized and addressed by academics, police organizations, and policymakers. However, further empirical research is needed to test these assumptions. A summary of our implications is provided in Table 3.

[Table 3 summary table: implications for practice, policy, and research]

Primary victimization: it's just a scratch, nothing to worry about.

Although police officers are at an increased risk of experiencing violence and negative consequences, they may not report more severe consequences than other professionals who experience violence (Dang et al., 2016). Nevertheless, it is important to acknowledge that they do indeed experience negative and far-reaching ramifications, as demonstrated by the serious consequences, risk factors, and protective factors that we identified in this scoping review. It is possible that some officers choose not to report negative consequences due to the perceived expectation of toughness and masculinity in police culture, which may suppress the expression of emotions (Dang et al., 2016; Evans et al., 2013; Gilleir, 2010; Laureys, 2014; Leino, 2013; Porter & Lee, 2023). It is therefore crucial for academia, police organizations, policymakers, and officers themselves to recognize and address the wide array of negative consequences that officers may experience as a result of violence.

The range of consequences discussed in this scoping review highlights the need for prevention efforts at the organizational level. The police organization has a crucial role to play in protecting against negative consequences instead of creating or exacerbating them (e.g., preparatory and follow-up training on how to handle and de-escalate possibly violent events may reduce PTS symptoms, whereas failing to offer accessible professional counseling may increase alcohol use). In the following section, we discuss some of the proactive measures that police organizations can implement to mitigate the negative effects of violence on police officers.

Violence against police can result in negative consequences such as fear of revictimization and increased alcohol consumption. Therefore, prevention efforts should be a

main pillar of focus for police organizations. One effective approach is to organize training programs on how to handle and de-escalate potentially violent events in the future, which could, for example, help to reduce alcohol use (Leino, 2013). It is worth noting that this initiative may also be beneficial for fear of re-victimization. However, there is a lack of specific research on the effectiveness of this approach for addressing violence against police.

Just like in the general population, victimization can increase the fear of crime⁶ (Curiel & Bishop, 2018) or fear of re-victimization among police officers (Leino, 2013). This fear and associated stress can also affect decision-making, which may result in an increased risk of re-victimization (Ellrich & Baier, 2016). In the general population, accommodative coping has been shown to decrease the correlation between fear of crime and victimization (Rühs et al., 2017). Accommodative coping involves *"flexible adaptation of personal aims and values according to the given circumstances and resources available"* (Rühs et al., 2017, p. 361). After experiencing victimization, accommodative coping can be promoted by reframing unrealistic goals, re-evaluating the victimization experience positively (e.g., focusing on support from family and friends), and modifying expectations (Rühs et al., 2017). To enhance accommodative coping among police officers, police organizations could provide professional counseling, self-help information on coping, and follow-up debriefing.

Police officers find other forms of organizational support beneficial, such as information on stress management, administrative assistance, systematic follow-up, accessible counseling, and collegial support systems. It is crucial for police superiors to provide followup, show empathy, and be attentive to adverse consequences. ARQ (2021) and Santa Maria et al. (2018) suggest that police superiors may benefit from training on how to recognize various psychological signs and symptoms.

The aim of our study was to raise awareness about violence against police and its consequences and to encourage further research in this field. To overcome the current

limitations of the literature, future studies could explore a wide range of consequences, risk and protective factors related to violence against police, as well as include more diverse samples of police officers. One area of interest for future research could be the potential anticipation and recovery effects of victimization experiences, as suggested by Janssen et al. (2021). Specifically, future studies could investigate whether the anticipated risk of experiencing violence or witnessing violence against colleagues triggers psychological changes or consequences. Moreover, it would be valuable to examine how officers recover and adapt from victimization experiences. Studies could also examine the consequences of verbal violence, the impact of event characteristics on adverse consequences, fear of crime as a consequence, the protective role of police organizations, and other unexplored outcomes, such as hypervigilance, burnout, and job satisfaction or work motivation. Ideally, future research would include case studies or focus groups and employ causal designs. Ellrich & Baier (2016) and Leino (2013) assume a potential causal relation between fear of crime or excessive alcohol use on actual future victimization, which should be explored by future research. Furthermore, given that 21 studies conducted in only nine countries were found in this scoping review, future research should explore this topic in other (non-Western) countries to include a more diverse sample and avoid overlooking officers. Secondary victimization: is it not just part of the job?

We argue that police officers are not fully recognized as victims in society, partially due to societal perceptions about police use of force. These perceptions align with Christie's (1986) ideal victim theory, which posits that legitimate or ideal victims possess five attributes: blamelessness, performing a noble task, weakness, victimization by unidentified evil forces/actors, and claiming victim status. Failure to meet these characteristics results in an illegitimate victim status (Lewis et al., 2021). Christie's theory has received empirical support and is believed to apply to various victim types (Lewis et al., 2021). We argue that the same principles apply to police victims.

Police officers who are victims of violence may not be viewed as legitimate victims by society, which can be attributed in part to negative perceptions about police stemming from use-of-force incidents. In fact, research has shown that public perceptions of police are negatively affected by controversial police actions and use-of-force incidents (Graziano, 2019; Jackson et al., 2021). Moreover, some individuals associate police with injustice, abuse of power, and harm (Italiano et al., 2021). As a result, police officers may not meet perceived criteria for being considered victims, such as doing a noble task, being weak, or being blameless. Therefore, they are unable to claim victim status. In contrast, healthcare workers can more easily claim victim status due to their perceived noble task, weakness, and blamelessness in taking care of patients. This is evident in the abundance of studies on the consequences of workplace violence against healthcare professionals, with a systematic review yielding 68 studies (Lanctôt & Guay, 2014) and a rapid literature scan revealing an additional 22 possibly relevant studies. Conversely, only 13 studies that specifically focused on the consequences of violence against police (while other studies focused on wider issues such as policing, police stressors, and traumatic events with only a small section on violence against police) were identified in this scoping review, which is considerably less compared to the volume of research on violence against healthcare workers. Therefore, it is important for future research to address the lack of attention paid to violence against police and its consequences in order to better understand and address the issue.

The absence of victim status for police officers may underlie the unhelpful interactions within the police and legal system discussed in this scoping review, leading to secondary victimization. A culture within the police that stigmatizes victimization can trigger stress and anger, while a case being closed without consequences can leave officers feeling abandoned by the criminal justice system and with a sense of impunity (Dawes et al., 2019; Laureys, 2014; Zietlow, 2016). Policymakers and the legal system can demonstrate support by sending a clear message and adopting a consistent approach to violence against police. Encouragingly, handling the majority of cases involving violence against police in court is already a positive step (Laureys, 2014). To prioritize the issue of violence against police and the well-being of officers, policymakers must take steps to increase awareness of its severity and encourage reporting of such incidents and their consequences. By doing so, policymakers can help counteract the illegitimate victim perspectives that are currently hindering progress in this field. A summary of our critical findings can be found in Table 4.

[Table 4 summary table: critical findings]

Strengths and Limitations

This scoping review demonstrated several methodological strengths, such as the use of three search methods to ensure broad literature coverage and the inclusion of methodologically weaker studies while assigning them a lower weight in the analysis. This approach allowed for the incorporation of all insights while ensuring that the analysis primarily relied on the methodologically stronger studies. Additionally, the structured searches and quality assessment showed high interrater reliability between two authors. However, several limitations should be acknowledged. Database screening on title and abstract, reference mining, purposive sampling, and analyses could only be conducted by a single author, potentially missing other relevant studies. Nonetheless, we are confident that the screening and analyses are as accurate as possible, given the variety of screening methods (database searches, reference mining, and purposive sampling), the achievement of saturation, and assigning weights to studies without excluding those of lower quality. Additionally, the choice to only search two databases and exclude unpublished literature and studies prior to 2010 may have introduced potential bias. The heterogeneity of included studies in focus, study design, and methods also limited the in-depth analysis of concepts and led us to focus on generating descriptive themes and concepts until saturation was reached, rather than more analytical themes.

Conclusion

This scoping review serves as a pioneering effort in mapping the psychological and physical outcomes of verbal and physical violence against police, along with identifying the risk and protective factors that respectively exacerbate and alleviate the negative consequences. The dearth of (recent) studies and the narrow perspective through which the topic is examined have stagnated the literature. We argued that the lack of scholarly attention is rooted in prevalent societal viewpoints and the perceived lack of victim status of officers. We also discussed the implications of this phenomenon on both primary and secondary victimization, and emphasized the relevance of our findings for police, policymakers, and future research. By conducting this much-needed scoping review, we hope to reignite academic interest in this topic and shed light on why the aftermath of violence against police should not be reduced to a mere occupational hazard. Police officers suffer 'more than just a scratch' and experiencing violence in the line of duty should not be considered 'a part of the job'.

Footnotes

¹ "The core features of PTSD are the persistence of intense, distressing, and fearfully avoided reactions to reminders of the triggering event, alteration of mood and cognition, a pervasive sense of imminent threat, disturbed sleep, and hypervigilance" (Shalev et al., 2017, p. 2459).

 2 0 = removed from scoping review, 1 = included in scoping review.

³ Somatic disturbances refer to "the expression of psychological or emotional distress through physical symptoms that are otherwise unexplained" (Nazzal et al., 2021, p. 1).

⁴ "Psychological distress is a not disease per se but typified by psychophysiological and behavioral symptoms that are not specific to a given mental pathology such as anxious and depressive reactions, irritability, declining intellectual capacity, tiredness, sleepiness, absenteeism from work, etc." (Marchand et al., 2003, p. 419).

⁵ "An ambush is a planned surprise attack on a human target. The attacker has done some planning and the victim is surprised" (Fachner and Thorkildsen, 2015, p. 2).

⁶ We refer to 'fear of crime' as an emotional, cognitive and/or behavioral reaction characterized by fear produced by the (potential) threat of harm and/or victimization of a criminal incident (Garofalo, 1981, p. 840; Greve, 1998; Henson and Reyns, 2015).

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Tables

Table 1

Search strings for Web of Science and Google Scholar

Web of	((violen* OR abuse OR assault OR force OR injur* OR attack OR aggression) AND (against OR toward*) AND (polic* OR
Science	authorities OR law enforcement OR officer) AND (consequence\$ OR injur* OR impact OR effect) AND (physical OR
	psychological) NOT (polic* violen* OR violen* by polic* OR polic* agression))
Google	We used combinations of search terms via the 'advanced search' option: consequence/injury/impact/effect;
Scholar	violence/abuse/assault/force/injury/attack/aggression; against/towards; police/authorities/law enforcement/officer; "police
	violence"

Table 2

Description of the final shortlist

Study	Weight	Country	Data type	Sample	Sample characteristics related to diversity	Data collection & analysis	Type of violence	Type of consequence
ARQ (2021)	2	Netherlands	Р	n = ?	/	Qualitative semi- structured focus groups	Physical	Psychological
Beagley et al. (2018)	6	United States	S	n = 189	Gender (M: 147; F: 42) Age (mean) (M: 40,4; F: 36,5) Ethnicity (white: 93%, other: 7%)	Quantitative survey + Moderation analyses	Physical	Psychological
Brandl & Stroshine (2012)	4	United States	S	n = 4,979	/	Injury files + Descriptive univariate and bivariate statistics	Physical	Physical

Brewin et al. (2020)	6	United Kingdom	Р	n = 10,401	Gender (M: 6354; F: 3147) Age (<24: 187; 25-34: 1983; 35-44: 3770; 45-54: 3523; 55+: 240)	Quantitative survey + LR	Physical & verbal	Psychological
Dang et al. (2016)	6	France	Р	n = 167	Gender (M: 80%; F: 20%) Age (mean): 31	Quantitative survey + LR	Physical	Psychological
Dawes et al. (2019)	3	Australia	Р	n = 40	Gender (M: 28; F: 12)	Qualitative semi- structured interviews	Physical	Psychological & physical
Ellrich & Baier (2016)	4	Germany	S	n = 20,938	Gender (M: 80%; F: 20%) Age (mean): 41,3	Quantitative survey + LR	Physical & verbal	Psychological & physical
Ellrich & Baier (2017)	6	Germany	S	n = 681	Gender (M: 84,7%; F: 15,3%) Age: (<30: 16,5%; 30- 50: 68,4%; 50+: 15,1%)	Quantitative survey + Regression & mediation analysis	Physical	Psychological
Evans et al. (2013)	6	United Kingdom	Р	n = 19	Gender (M: 13; F: 6) Age (mean): 36 Ethnicity (white: 16; other: 3)	Qualitative semi- structured interviews + Thematic analysis	Physical	Psychological
Geoffrion et al. (2016)	6	Canada	S	n = 373	Gender (M: 61,2%; F: 38,8%) Age (15-25: 8,7%; 26- 35:28,8%; 36-45: 22,3%; 46-55: 31,9%; 56+: 8,4%)	Quantitative survey + LR	Physical	Psychological
Geoffrion et al. (2017a)	6	Canada	Р	n = 111	Gender (M: 73,9%; F: 26,1%) Age (26-35)	Quantitative survey + Hierarchical linear regression	Physical	Psychological

MORE THAN JUST A SCRATCHGeoffrion et6CanadaSn = 536Gender (M: 63,1%; F:Quantitative survey +al. (2017b)36,9%)LRAge (<35: 39,9%; 36-
45: 28%; 46-55: 29%;
56+:3%)Cilluis (2010)ADebieneDCilluis (2010)ADebieneD

al. (2017b)					Age (<35: 39,9%; 36- 45: 28%; 46-55: 29%; 56+:3%)	LK	Physical	Psychological
Gilleir (2010)	4	Belgium	Р	n = 36	/	Qualitative in-depth interviews	Verbal	Psychological
Houdmont et al. (2020)	6	United Kingdom	Р	n = 34 n = 229	Interviews: Gender (M: 25; F: 9) Age (40-49) Survey: Gender (M: 73%; F: 27%) Age (30-59)	Qualitative semi- structured interviews + quantitative survey + Hierarchical multiple linear regression	Physical	Psychological
Laureys (2014)	2	Belgium	Р	n = 14	/	Qualitative semi- structured interviews	Physical	Psychological & physical
Leino et al. (2011)	6	Finland	Р	n = 986	Gender (M: 85%; F: 15%) Age (<25: 22%; 25- 34: 36%; 35-44: 20%; 45-54: 17%; >55: 5%)	Quantitative survey + LR	Physical	Psychological
Leino et al. (2012)	6	Finland	Р	n = 1,734	Gender (M: 90%; F: 10%) Age (<35: 48%; 35- 44: 28%; 45+: 24%)	Quantitative survey + LR	Physical	Psychological & physical
Leino (2013)	6	Finland	Р	n = 1,734	Gender (M: 91%; F: 9%) Age (mean) (38)	Quantitative survey + LR	Physical & verbal	Psychological & physical
Rentmeesters & Hermans (2023)	6	Belgium	Р	n = 1,465	Gender (M: 1042; F: 423) Age (<24: 44; 25-34: 436; 35-44: 462; 45- 54: 394; 55+: 129)	Quantitative survey + LR	Physical	Psychological

Santa Maria et al. (2018)	6	Germany	Р	n = 843	Gender (M: 72,2%; F: 27,8%) Age (mean) (19,8)	Quantitative survey + Structural equation modeling	Verbal	Psychological
Zietlow (2016)	5	Germany	Р	n = 35	Gender (M: 95%; F: 5%) Age (mean) (39,4)	Qualitative semi- structured interviews + Content analysis	Physical	Psychological

Note. Logistic regression (LR); primary data (P); secondary data (S); male (M); female (F)

Table 3

Implications for research, practice, and policy

Research	 Incorporate a diversity of consequences, risk factors, and protective factors when studying violence against police Test Christie's (1986) ideal victim theory on violence against police
	 Study the consequences of violence against police with a more diverse sample of police officers, including officers of various ethnicities, cultural backgrounds, gender identities, religions, or socioeconomic statuses
	Report all diversity-related items
Practice	• Set up de-escalation training, accommodative coping, stress management info, administrative support, follow-up, accessible counselling, and collegial support systems
	Foster an inclusive police culture that does not stigmatize victimization
Policy	Eliminate unsupportive interactions by handling cases in court
	Raise awareness about violence against police
	• Stimulate the reporting of incidents and consequences

Table 4

Critical findings

Consequences, risk factors, and protective factors	Standstill of the literature			
 Physical violence (Figures 2, 3, & 4) Consequences: physical trauma + psychological trauma (psychological symptoms indicative of disturbances and psychological burden) Protective factors: effective coping strategies, police organizational support, supportive interactions Risk factors: individual characteristics, unsupportive interactions, characteristics of the violent event 	 The dearth of (recent) studies and the narrow perspective through which the topic is examined have stagnated the literature This stagnation of the literature might be influenced by: Prevailing societal perspectives: perceived expectation of toughness and masculinity in police culture 			
 Verbal violence (Figure 5) Consequences: emotional exhaustion, psychological distress, private life Protective factors: changing jobs and training 	• The perceived victim status of police officers: illegitimate victim			

Figures

Figure 1

Flow chart of study identification, screening, and inclusion



Figure 2

Code tree of physical violence: description of adverse consequences



Figure 3

Code tree of physical violence: risk factors that increase adverse consequences



Figure 4

Code tree of physical violence: protective factors that decrease adverse consequences



Figure 5

Code tree of verbal violence

