

Examining correlates of police officers' attitudes towards seeking mental health support: A scoping review

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Abstract: Police officers are often unwilling to seek psychological support when needed. This scoping review explored research into the correlates of police help-seeking attitudes. Searches returned 1754 initial results, with 21 quantitative, peer-reviewed studies retained (published 1995–2022 across six countries; of moderate quality). The most consistent positive associates of police help-seeking attitudes were past help-seeking, perceived service availability, and having a mental health diagnosis. Current PTSD symptoms were the most consistent negative associate. However, of the 102 correlates identified, most were under-researched and/or had inconsistent findings. The operationalisation of terms also varied greatly. High-quality replication of current research is now needed.

Keywords: Help-seeking, police, mental health, scoping review

Introduction

Policing is an inherently dangerous, stressful, and traumatic job. Stress in policing is usually divided into two categories. Operational stressors relate to the nature of policing (e.g. exposure to death), whereas organisational stressors relate to how the organisation is run, such as equipment quality (Violanti et al., 2017). Unsurprisingly, both stressor types negatively impact officers' mental health, increasing symptoms of post-traumatic stress

disorder (PTSD), occupational stress, distress, and emotional exhaustion (Purba and Demou, 2019; Wagner et al., 2020). Similar evidence continues to emerge internationally (e.g. Craddock and Telesco, 2022; Houdmont et al., 2020). A recent meta-analysis, using data from 272,463 police officers from 24 countries, found concerning rates of PTSD (14.2%), anxiety (9.6%), depression (14.6%), suicidal ideation (8.5%), and alcohol misuse (25.7%), which were far higher than estimates for the general population (Syed et al., 2020). Similarly, in the 2021/2022 UK

National Police Wellbeing Survey, officers reported concerning levels of fatigue, anxiety, and depression (Graham et al., 2022).

Interestingly, these findings appear to contradict a recent large-scale UK study, where rates of PTSD, anxiety, and depression were lower than in Syed et al. (2020) and considered similar to the general population (Stevelink et al., 2020). Stevelink et al. (2020) argue that their estimates are more realistic than others because their study was not advertised as focussing on mental health, which can inflate rates of mental health difficulties. However, even if police officers' difficulties are no more common than in the general population, their occurrence remains a concern, not only for officer wellbeing, but for the economy and public safety. Mental health difficulties in police officers can have numerous negative outcomes, including 'poorer quality of life, elevated risk of errors, aggression, cardiac deaths, substance misuse, absenteeism, and suicide' (Syed et al., 2020: p. 737). Similarly, one fifth of sick leave taken by UK Metropolitan Police officers in 2021 was related to mental health (Metropolitan Police, no date).

Police mental health may be threatened further by the increasingly negative public perception of the police. For example, during the COVID-19 pandemic, British police have been scrutinised for both issuing (Lowbridge, 2021) and not issuing (Sandford, 2022) fines. Recent incidents of officer brutality and misdemeanour (e.g. the murders of George Floyd and Sarah Everard) may have tarnished the reputation further, even if not representative of all officers (BBC News, 2021; Bell, 2022; Hill et al., 2022). Recent research found that attitudes towards the police among US college students became more negative following George Floyd's murder and the start of the Black Lives Matter movement (Verhaeghen and Aikman, 2022). Similarly, UK data collected by the research firm YouGov indicates that the proportion of people reporting that the police were doing a 'good job' fell from 75% in July 2019 to 53% in January 2022 (Kirk, 2022). The respect and admiration of others has been shown to predict self-esteem (Mahadevan et al., 2021), which in turn predicts wellbeing (Mann et al., 2004). Therefore, negative public perception may be an additional threat to police mental health.

Given the multiple pressures on police wellbeing, and their effects on both officers and the public, it seems crucial that officers seek psychological support (i.e. assistance from a trained mental health professional; Mackenzie et al., 2004) where necessary. However, officers may not always do so. Rates of police help-seeking vary, likely based on the nature of the sample and the operationalisation of help-seeking. For example, the proportion of police samples with concerning exposure to stress or concerning levels of distress who did not access psychological support can range from 26.7% (Drew and Martin, 2021) to 83% (Jetelina et al., 2020). However, even the lower estimate suggests notable issues in service uptake, with over a quarter of officers who might need help not seeking it. Similarly, a study of police responders to the World Trade Centre attack found that a quarter of officers were experiencing at least one

barrier to seeking support (DePierro et al., 2021). This figure was even higher (43.7%) among officers with concerning levels of distress (DePierro et al., 2021).

An increasing number of studies have explored why police officers – working in a job which presents multiple challenges to mental health – are nevertheless unwilling to seek psychological support. This is an important area of research. If factors affecting officers' help-seeking attitudes can be identified, they may serve as fruitful loci of intervention to help ensure officers access the support they need. A range of help-seeking barriers have been identified in the literature, including stigma from self and others, a feared impact on career progression, and perceived lack of support from the police as an organisation (e.g. Edwards and Kotera, 2021; Johnson, 2016; Tucker, 2015). Whilst the breadth of factors examined in these studies is important for a comprehensive understanding of police help-seeking, it also makes it difficult to gain a coherent picture of the current knowledge.

Three recent reviews exploring barriers to police help-seeking have attempted to address this (Haugen et al., 2017; Richards et al., 2021; Velazquez and Hernandez, 2019). However, they each have important limitations. Haugen et al. (2017) considered first responders, not specifically police. Moreover, their aim was not to identify the correlates of help-seeking attitudes, but to explore how often officers endorsed various barriers and aspects of stigma. Similarly, Velazquez and Hernandez (2019) thematically explored stigma and barriers to help-seeking among police officers, without considering which factors were correlated with their constructs of interest. In contrast, Richards et

al. (2021) systematically identified factors associated with help-seeking attitudes. However, the review omitted several relevant papers: some due to recency, others likely due to the authors' search terms which were inconsistently applied across databases and appeared too restrictive (e.g. requiring search results to include the terms "occupational health" OR "occupational diseases/psychology" OR burnout OR "PTS*" OR trauma'; Richards et al., 2021: p. 352). Other limitations to the reviews included geographical restriction to North America (Richards et al., 2021; Velazquez and Hernandez, 2019), reliance on a large number of unpublished theses (Haugen et al., 2017; Richards et al., 2021), and lack of critical appraisal of the primary studies included (Richards et al., 2021; Velazquez and Hernandez, 2019).

The current review aims to address these limitations. Specifically, the review will explore the factors associated with police officers' help-seeking attitudes by addressing the following questions:

1. How have attitudes towards seeking psychological support been operationalised across studies in police populations?
2. Which factors have been investigated as possible correlates of attitudes towards seeking psychological support in the police?
3. Which factors have been shown to correlate with attitudes towards seeking psychological support in the police?

In accordance with guidance from Munn et al. (2018), a scoping review was deemed more appropriate than a systematic review. Police help-seeking is a rapidly developing area of research and, as explained above, the scope and focus of current literature has not been fully captured in previous reviews.

Method

This review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines for scoping reviews (Tricco et al., 2018).

Search strategy and study selection

Based on the most recent pre-existing review (Richards et al., 2021), access to databases, and advice from a university librarian, three primary databases were selected: Scopus, Health Research Premium Collection (via ProQuest), and Web of Science. Table 1 indicates database selections within each primary database.

Search terms were generated for three topics: police, help-seeking, and attitudes (see Table 2). Initial terms were tested in Scopus to maximise the precision and relevance of the results. Where known relevant papers were not returned by the search, their abstracts were scanned and the search terms refined accordingly. Additional relevant synonyms for each term were also identified from a general thesaurus and from the alternatives suggested when searching within EBSCOhost. All searches were conducted by the first author. Final searches were performed on 21st July 2023.

The search results were exported into RefWorks, which automatically identified duplicates. The first author screened the results for relevance, eligibility, and further

Table 1. Databases included in the literature search.

Primary database (publication years covered)	Databases included
Scopus (1970 – present)	- Main results ^a - Secondary documents ^a

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Health Research Premium Collection (1946 – present)	- Consumer Health Database
	- Health & Medical Collection
	- Healthcare Administration Database
	- MEDLINE®
	- Nursing & Allied Health Database
	- Psychology Database
	- Public Health Database
Web of Science	- Web of Science Core Collection (2016 – present)
	- BIOSIS Citation Index (1926 – present)
	- Current Contents Connect (1998 – present)
	- Data Citation Index (1900 – present)
	- KCI – Korean Journal Database (1980 – present)
	- SciELO Citation Index (2002 – present)

Note.

^a '[A] secondary document is a document that has been extracted from a Scopus document reference list but is not available directly in the Scopus database since it is not indexed by Scopus' (Scopus, 2021, 'Secondary documents').

Table 2. Search terms, settings, and limiters by database.

Database	Search terms	Additional settings or limiters
Scopus (basic search)	<i>Abstract:</i> ((Police OR 'law enforcement') AND (officer* OR agent* OR member* OR responder* OR personnel)) OR (policeman OR 'police man' OR policemen OR 'police men' OR policewoman OR 'police woman' OR policewomen OR 'police women') AND <i>Abstract:</i> (Help OR support OR care OR 'mental healthcare' OR treatment OR counselling OR counselling OR therapy OR psychotherapy OR service*) W/5 (seek* OR access* OR use* OR utilis* OR utiliz*) AND <i>Abstract:</i> Attitude* OR perceive* OR perception* OR opinion* OR view* OR	None

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	belief* OR believe* OR willing* OR desire* OR intend* OR intention* OR facilitat* OR barrier* OR stigma* OR hinder* OR prevent*	
	AND NOT	
Health Research Premium Collection (advanced search)	<i>Abstract:</i> 'Service user*' OR 'service-user*' policemen OR 'police men' OR policewoman OR 'police woman' OR policewomen OR 'police women') in Abstract ((Police OR 'law enforcement') AND (officer* OR agent* OR member* OR responder* OR personnel)) OR (policeman OR 'police man' OR	Peer-reviewed articles only
	AND	Spelling and form variants
	(Help OR support OR care OR 'mental healthcare' OR treatment OR counselling OR counselling OR therapy OR psychotherapy OR service*) NEAR/5 (seek* OR access* OR use* OR utilis* OR utiliz*) in <i>Abstract</i>	for search terms included
	AND	Duplicates excluded
	Attitude* OR perceive* OR perception* OR opinion* OR view* OR belief* OR believe* OR willing* OR desire* OR intend* OR intention* OR facilitat* OR barrier* OR stigma* OR hinder* OR prevent* in <i>Abstract</i>	
	NOT	
	'Service user*' OR 'service-user*' in <i>Abstract</i>	

(continued)

Table 2. (continued)

Database	Search terms	Additional settings or limiters
Web of science (advanced search)	(((AB=(((police OR 'law enforcement') AND (officer* OR agent* OR member* OR responder* OR personnel)) OR (policeman OR 'police man' OR policemen OR 'police men' OR policewoman OR 'police woman' OR policewomen OR 'police women')))) AND AB=((help OR support OR care OR 'mental healthcare' OR treatment OR counselling OR counselling OR therapy OR psychotherapy OR	'Exact search' turned off

service*) NEAR/5 (seek* OR access*
OR use* OR utilis* OR utiliz*)) AND
AB=(attitude* OR perceive* OR
perception* OR opinion* OR view* OR
belief* OR believe* OR willing* OR
desire* OR intend* OR intention* OR
facilitat* OR barrier* OR stigma* OR
hinder* OR prevent*) NOT
AB=('service user' OR 'service-user')

duplication, first by title/abstract and then by full text. Papers whose full text was unavailable were excluded. The reference lists of the three previous reviews (Haugen et al., 2017; Richards et al., 2021; Velazquez and Hernandez, 2019) and of all eligible papers were manually searched for additional relevant studies. The first author also included any known relevant papers which the searches did not return.

Eligibility criteria

Study design and outcomes. The review selected quantitative studies which measured the association between *attitudes* towards help-seeking (dependent variable) and any other independent variable(s). Studies could be cross-sectional or longitudinal. Any analytical method which tested the association between variables (e.g. correlation and regression) or explored group differences (e.g. *t*-tests, ANOVA) was included. Qualitative studies were excluded. Barriers to help-seeking which are appropriate for intervention should be widely experienced and have a substantial impact on help-seeking – factors which cannot easily be assessed from qualitative studies.

Studies of help-seeking *behaviour* were also excluded because the correlation between help-seeking attitudes and behaviour is far from perfect (Mojtabai et al., 2016). Intervention studies were excluded as it can be difficult to ascertain which aspect(s) of the intervention was associated with any effect. It seems more appropriate to investigate interventions after factors that are associated with help-seeking attitudes have been identified. This study focused on original studies – reviews were only used to inform study selection.

Attitudes towards help-seeking were defined broadly to include any measure of participants' views, intentions, or stigma towards accessing support from a mental health service or professional (e.g. psychologist and counsellor). This review focused on attitudes rather than behaviour because the decision to actually seek support may be affected

by additional factors that are less amenable to intervention (e.g. negative life events), which are outside the scope of this review.

Participants. Eligible studies included currently serving or retired police officers in any country. There are substantial international differences between police forces, which could plausibly affect help-seeking attitudes (e.g. more in-duty officer deaths in the United States than in the United Kingdom; Belkin, 2021). Therefore, it was considered important to ascertain the location of existing research. Participants could be any age or rank. Studies with mixed samples of multiple professionals (e.g. first responders) were not included unless results were reported separately for the police sub-sample. Studies were not included if they focused solely on police staff (e.g. call handlers), who were not sworn/warranted officers. However, studies which involved both officers and staff were included (although only the officer results were considered, if reported separately). No limits were placed on sample size.

Study characteristics. Studies conducted and published in any country were permitted. However, the reports had to have been written in English, German, or French due to the lack of capacity for translation. No restrictions were placed on year of publication. Studies were only included if the full text was accessible.

Only published, peer-reviewed studies were included in the review. Factors which are correlated with police help-seeking attitudes may serve as future intervention loci to encourage police to access support when needed. Consequently, study quality is paramount. Given the ample literature available, it was deemed most efficient to only include studies which had been pre-screened for quality through peer review.

Data charting

A data charting form, following relevant guidance (Arksey and O'Malley, 2005; Downes et al., 2016; Peters et al., 2020; Tricco et al., 2018), was designed to extract data relevant to the research questions and study quality (e.g. design and measures). As recommended by Levac et al. (2010), the form was developed dynamically throughout data charting.

Critical appraisal

In order to clarify the rapidly expanding evidence base on police help-seeking attitudes, it is important to determine the quality of the studies. Previous reviews (Haugen et al., 2017; Richards et al., 2021; Velazquez and Hernandez, 2019) did not always assess quality and included many unpublished dissertations, which may be held to less rigorous standards. The AXIS tool (Downes et al., 2016) was used to critically appraise all studies in this review. The AXIS was specifically designed for cross-sectional, observational studies. It involves the assessment of 20 items, such as the quality of study design, risk of biases, and reporting quality. No overall score is obtained. Rather, each item (e.g. 'Were the aims/ objectives of the study clear?') was rated as true ('yes'), untrue ('no'), partially true ('some'), or unclear ('?'; see Appendix).

Results

Overview

The literature search returned 1744 initial results, with 772 duplicates subsequently removed (see Figure 1). In total, 972 papers were screened by title/abstract. Out of the 58 papers whose full text was sought, five were inaccessible and 34 were not eligible. For each ineligible paper, the primary reason for exclusion was identified: 15 did not measure an association between help-seeking attitudes and other variables; four had a sample incompatible with the specified criteria; two were unpublished theses; nine were not quantitative; and four measured help-seeking behaviour. The remaining 19 studies were included in the review. Their reference lists were then screened and nine further relevant studies were identified. One was inaccessible but eight were screened for eligibility, with one retained. One final study, known to the first author, was added, leading to a total of 21 studies included in the review.

Table 3 summarises the included studies. The studies were published between 1995 and 2022. They spanned six countries but were biased towards the United States ($n = 14$) over Canada ($n = 5$), Ireland ($n = 2$), the United Kingdom ($n = 2$), Australia ($n = 1$), and New Zealand ($n = 1$). All but two focused exclusively on police. Krakauer et al. (2020) studied public safety personnel and DePierro et al. (2021) studied World Trade Centre responders, but both presented results separately for the police sub-sample. Krakauer et al. (2020) studied both sworn officers and police staff. All other studies examined sworn officers exclusively or presented results separately for sworn officers.

Figure 1. Flow Diagram^a Illustrating Study Selection. Note.^a Following Page et al. (2021).

Table 3. Study characteristics.

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Authors and year	Participants			Measure of help-seeking attitudes (number of questions; scale)	Correlates
	<i>Number</i>	<i>Location</i>	<i>Agency Type</i>		
Asen and Colón (1995)	<i>n</i> = 82	New Jersey, United States	Municipal	Acceptance of the EAP (12; 4-point)	- Age - Gender - Length of service - Number of children - EAP training - Past help-seeking - Having seen EAP policy
Carlan and Nored (2008)	<i>n</i> = 1083	Alabama, United States	Municipal	Would use counselling via department if necessary (1; 5-point)	- Whether department offered counselling
Ceka and Ermasova (2021)	<i>n</i> = 431	Illinois, United States	Multiple	Likelihood of using the EAP following critical incident/stress at work (1; 5-point)	- Gender - Length of service - Ethnicity - Education - Perceived effect on promotion - Confidence in department's assistance - Organisational stressors
Copenhaver and Tewksbury (2018)	<i>n</i> = 359	United States	State	Would seek professional help for depression (1; yes/no)	- Age - Length of service - Education - Role - Shift - Overall health - Depression since joining

police

- Exercise
- Recreational sports participation
- Alcohol consumption
- Stimulant drinks per shift
- Sleep
- Fast food consumption
- Perceived control of job

(continued)

Table 3. (continued)

Authors and year	Participants			Measure of help-seeking attitudes (number of questions; scale)	Correlates
	Number	Location	Agency Type		
Daniel and Treece (2022)	<i>n</i> = 78	United States	Multiple	Considering seeking mental health services in the future (1; yes/no)	- Gender - Length of service - Agency size - Past help-seeking - Psychological openness - Help-seeking propensity - Indifference to stigma - Compassion satisfaction - Burnout - Secondary traumatic stress
DePierro et al.	<i>n</i> = 1178	United States	9/11 responders	Endorsing any of	-Age

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(2021)			with mental health difficulties	seven barriers to using stress-management services	- Gender - Ethnicity - Education - Relationship status - Income - Pre-9/11 diagnosis of depression/anxiety/ PTSD - World trade centre exposures - World trade centre-related medical conditions - PTSD - Depression - Alcohol misuse - Time since 9/11 - Perceived mental health service need
Heffren and Hausdorf (2016)	n = 102	Peel Regional Police, Ontario, Canada	Municipal	Likelihood of seeking help for work stress from a professional at/ outside of work (2; 5-point)	- Type A personality: Achievement-striving; impatience-irritability - Distress disclosure - Help-seeking attitudes - Self-stigma - Public stigma - Perceived organisational support - Reciprocal relationship with supervisor - Organisational climate of fear

- Social support
- Turnover intentions

(continued)

Table 3. (continued)

Authors and year	Participants			Measure of help-seeking attitudes (number of questions; scale)	Correlates
	Number	Location	Agency Type		
Hyland et al. (2012)	<i>n</i> = 259	Ireland	Unknown	Intentions to engage in psychological counselling (3; 7-point)	-Age - Length of service - Help-seeking attitudes - Subjective norms - Perceived behavioural control: Internal control; external control
Hyland et al. (2015)	<i>n</i> = 331	Ireland	Unknown	Intentions to engage in psychological counselling (3; 7-point)	-Age - Psychological openness - Help-seeking propensity - Indifference to stigma - Psychoticism - Extraversion - Neuroticism
Jetelina et al. (2020)	<i>n</i> = 114	Dallas Police Department, United States	Municipal; mental health difficulties	Interest in help from mental health services (1; yes/ no)	- Depression - Anxiety - PTSD - Suicide/self-harm ideation
Karaffa and	<i>n</i> = 158	Texas, United	Multiple	ATSPPH-SF (10;	-Age

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Tochkov (2013)		States		4-point)	- Gender - Length of service - Ethnicity - Education - Relationship status - Perceived help-seeking willingness of colleagues - Identification with police officers - Police culture: Aggression; emotional control; bravery; autonomy; secrecy; distrust of outsiders
Karaffa and Koch (2016)	<i>n</i> = 248	Texas and Oklahoma, United States	Multiple	ATSPPH–SF (10; 4-point)	- Public stigma - Self-stigma - Voluntary past help-seeking

(continued)

Table 3. (continued)

Authors and year	Participants			Measure of help-seeking attitudes (number of questions; scale)	Correlates
	Number	Location	Agency Type		
Krakauer et al. (2020)	<i>n</i> = 2135	Canada	<i>n</i> = 1065 municipal/provincial; <i>n</i> = 1070 Royal Canadian Mounted Police	Mental Health Service Use Questionnaire (4; 7-point)	- Mental health knowledge - Workplace stigma
Lane et al. (2022)	<i>n</i> = 112	Ontario, Canada	Municipal	Likelihood of seeking mental health treatment from a professional for	- Age - Gender - Length of service

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				current/future mental health concern (1; 0–100)	- Mental health diagnosis - Training: Mental health response officer; mental health first aid - CISM: Debrief; defuse - Current resilience - Perceived change in resilience
Ménard et al. (2016)	<i>n</i> = 1286	United States, Canada, United Kingdom, Australia, and New Zealand	Multiple	Feeling they could use department's services (1; yes/no)	-Age - Gender - Length of service - Ethnicity - Country - Community size - Relationship status - Trauma exposure - Alcohol misuse -PTSD - Military experience - Social stressors - Living with dependent children - Perceived service availability - Negative coping strategies
Short (2021)	<i>n</i> = 173	Eastern Canada	Regional	ATSPPH–SF (10; 4-point)	- Operational stress - Organisational stress

- Public stigma
- Self-stigma
- Psychological quality of life
- Social relationships quality of life
- Perpetration of microaggressions

(continued)

Table 3. (continued)

Authors and year	Participants			Measure of help-seeking attitudes (number of questions; scale)	Correlates
	Number	Location	Agency Type		
Soomro and Yanos (2019)	<i>n</i> = 296	United States	Multiple	SSOSH (10; 5-point) PSOSH (5; 5-point)	- Gender - Ethnicity - Education - Knowing someone with mental health difficulties - PTSD - Mental health training
Tucker (2015)	<i>n</i> = 673	Pennsylvania, United States	Multiple	Willingness to use stress-intervention services following critical incident/stress (not reported; 5-point)	- Gender - Length of service - Ethnicity - Education - Relationship status - Active/retired - Agency size - Agency type - Role

					- Rank - Military experience - Perceived existence of police stress policies - Perceived organisational support - Confidentiality concerns/stigma (towards help-seeking) at work - Family support for career choice - Confidence in service providers - Health - Alcohol consumption - Stress - Trauma exposure - CISM/peer-support training - Use of trauma risk management
Watson and Andrews (2018)	<i>n</i> = 650	United Kingdom	Unknown	Stigma and Barriers to Care Questionnaire (13; 4-point) Military Stigma Scale (26; 4-point)	

(continued)

Table 3. (continued)

Authors and year	Participants			Measure of help-seeking attitudes seeking attitudes (number of questions; scale)	Correlates
	Number	Location	Agency Type		
Wester et al.	<i>n</i> = 178	South-eastern	Multiple; men	SSOSH (10; 5-point)	- Gender role

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(2010)		Wisconsin, United States	only	point)	conflict: Restrictive emotionality; restrictive affective behaviour between men; conflict between work and family relations; and success, power, and competition
				Stigma Scale for Receiving Psychological Help (5; 4-point)	- Anticipated benefit of help-seeking - Anticipated risk of help-seeking - Age
White et al. (2016)	<i>n</i> = 454	Arizona, United States	Multiple	SSOSH (10; 5-point) Adapted PSOSH (25; 5-point)	- Age - Gender - Length of service - Ethnicity - Agency size - Agency size - Union affiliation - Role - Agency type

Note. EAP = Employee Assistance Programme; PTSD = post-traumatic stress disorder; ATSPPH–SF = Attitudes Towards Seeking Professional Psychological Help–Short Form; CISM = Critical Incident Stress Management; SSOSH = Self-Stigma of Seeking Help Scale; PSOSH = Perceptions of Stigmatisation by Others for Seeking Help Scale.

The North American studies covered multiple agencies, including municipal, county, regional, state, federal, and university police. Agency type was not specified elsewhere. Samples were reasonably large (78–2135 participants), although 15 studies had under 500 participants and over a third had under 200. All studies employed a quantitative, observational, cross-sectional design, and used self-report questionnaires. DePierro et al. (2021) additionally used health examinations and clinical interviews. Only two studies did not explicitly aim to investigate correlates of help-seeking attitudes. Carlan and Nored (2008) examined correlates of police stress, while Hyland et al. (2015) investigated the psychometric properties of a help-seeking measure.

Critical appraisal

Study quality was assessed against 20 criteria (see Appendix). Although the AXIS tool has no quantitative score, all studies appeared to be of at least moderate quality. All had clear aims, appropriate designs, and appropriate

independent and dependent variables. Generally, the methods, sample, and basic measurements were detailed enough for contextualisation and replication. The target population was usually clear, and limitations

considered. Results were usually presented in full, but some studies mentioned secondary analyses/data collection, which were not reported. Missing data was often, but not always, accounted for. The authors' conclusions seemed mostly appropriate. However, the sampling frame was often too narrow. For example, Karaffa and Tochkov's (2013) population was US police but their sample came only from Texas. Moreover, sampling was not always random. Response rates were rarely reported, and the sample size rarely justified. Additionally, several studies did not fully compare the characteristics of participants to the broader population to assess the representativeness of their sample. Other studies did compare participants to non-participants but found demographic differences, such as age or ethnicity (see e.g. Jetelina et al., 2020). Studies also frequently employed unvalidated measures and omitted statistics for non-significant results. Most studies did not explicitly declare conflicts of interests and some did not explicitly state their ethics procedure.

Research question 1: Operationalising help-seeking attitudes

'Attitudes towards help-seeking' were operationalised very differently across studies. Most studies ($n = 16$) measured favourable attitudes (e.g. willingness to seek help; Tucker, 2015), but five studies studied barriers (e.g. stigma towards help-seeking; Soomro and Yanos, 2019). The terms used to refer to help-seeking attitudes varied greatly, including 'likelihood of', 'interest in', and 'concerns about' seeking help (see Table 4 for a complete list). Occasionally, the terminological disparity reflected a fundamental difference in the conceptualisation of the dependent and independent variables. Specifically, the dependent variable was behavioural (e.g. help-seeking *intentions*), while *opinions* on help-seeking were actually independent variables (e.g. Daniel and Treece, 2022). Similarly, in other studies, positive attitudes towards help-seeking were the dependent variable, while stigma/barriers were the independent variable (Krakauer et al., 2020; Tucker, 2015). Indeed, four measures (ATSPPH-SF; SSOSH; PSOSH; and Military Stigma Scale – see Table 3) were used to assess the dependent variable (i.e. help-seeking attitudes) in some studies, but to assess a potential correlate of help-seeking (e.g. stigma) in other studies.

In addition, studies differed concerning the providers of support. Most studies ($n = 14$) referred generically to professional/psychological help, counselling, or mental health services/providers/treatment. DePierro et al. (2021) and Tucker (2015) referenced stress counselling/management/intervention services but did not define these. Five studies (e.g. Tucker, 2015) referred specifically to services provided by/for the police. Studies also asked about seeking help for different reasons, such as mental health difficulties (e.g. Short, 2021), work-related stress/incidents (e.g. Tucker, 2015), depression (Copenhaver and Tewksbury, 2018), or a particular traumatic scenario (Hyland et al., 2012, 2015). One study actually informed participants that they may benefit from services following their responses (Jetelina et al., 2020). However, others were vague, not providing a reason for accessing support (e.g. Asen and Colón, 1995), or asking whether officers would seek help 'if needed' (Carlan and Nored, 2008), or in their current situation (e.g. Daniel and Treece, 2022).

Table 4. Operationalisation of help-seeking attitudes across the studies.

Term	Study
Whether officers...	
<i>Would use/seek help</i>	Carlan and Nored (2008) Copenhaver and Tewksbury (2018)
Feel they <i>could</i> use services	Ménard et al. (2016)

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Are <i>interested</i> in seeking help	Jetelina et al. (2020)
Are <i>willing</i> to seek help	Krakauer et al. (2020)
	Tucker (2015)
Are <i>considering/planning</i> to seek help	Daniel and Treece (2022)
Will try to participate in counselling	Hyland et al. (2012, 2015)
Have <i>decided</i> to participate in counselling	Hyland et al. (2012, 2015)
As well as...	
How <i>likely</i> officers were to seek help	Ceka and Ermasova (2021)
	Heffren and Hausdorf (2016)
	Hyland et al. (2012, 2015)
	Lane et al. (2022)
What <i>reasons would prevent</i> officers from using services	DePierro et al. (2021)
<i>Concerns when asking</i> for help	Watson and Andrews (2018)
<i>Stigma</i> towards oneself or from others	Soomro and Yanos (2019)
	Watson and Andrews (2018)
	Wester et al. (2010)
	White et al. (2016)
A range of different attitudinal items	Asen and Colón (1995)
	Karaffa and Koch (2016)
	Karaffa and Tochkov (2013)
	Short (2021)

Finally, the help-seeking measures varied significantly. Most studies (n = 15) employed a Likert scale, albeit with 4, 5, 7, or 100 points. Four (Copenhaver and Tewksbury, 2018; Daniel and Treece, 2022; Jetelina et al., 2020; Ménard et al., 2016) required a binary yes/no response. DePierro et al. (2021) and Carlan and Nored (2008) used scales but dichotomised the results for analysis. Similarly, while most measures involved multiple questions, seven studies used a single question. Moreover, most studies (n = 15) used at least one help-seeking measure that had not been validated or standardised.

Research question 2: Correlates studied

In total, 102 distinct correlates of help-seeking attitudes were identified. The number of studies in which each correlate was examined ranged widely. For example, income was only investigated once, whereas gender was investigated in 10 studies. Table 5 summarises the correlates, grouped thematically.

Table 5. Correlates of help-seeking attitudes.

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Correlate	Analytic method	Finding	Study
Demographic factors – officers			
Gender	Regression	Females > males	Ménard et al. (2016)
	Correlation Regression	Self-stigma and public stigma: Females > males	Soomro and Yanos (2019)
	ANOVA	Females < males	Ceka and Ermasova (2021)
	Mediation model	Significant	
	Regression	Non-significant	Daniel and Treece (2022)
			DePierro et al. (2021)
			Tucker (2015)
	<i>t</i> -test	Non-significant	Lane et al. (2022)
	Regression		
	<i>t</i> -test	Non-significant	Karaffa and Tochkov (2013)
	Correlation		
	Regression		
	<i>t</i> -test	Females > males (1 question) ^a Non-significant (11 questions) ^a	Asen and Colón (1995) White et al. (2016)
	Correlation	Self-stigma and public stigma: Significant	White et al. (2016)
	Regression	Self-stigma and public stigma: Non-significant	
Age	Regression	Non-significant	Copenhaver and Tewskbury (2018)
			DePierro et al. (2021)
			Karaffa and Tochkov (2013)
			Ménard et al. (2016)
	SEM	Non-significant	Hyland et al. (2015)
	Correlation Regression	Non-significant	Lane et al. (2022)
	Correlation	Positive (10 questions)	Asen and Colón (1995)
		Non-significant (2 questions)	
	Correlation	Non-significant	Hyland et al. (2012)
	SEM	Negative	

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Correlation	Self-stigma: Positive	White et al. (2016)
	Public stigma: Significant	
Regression	Self-stigma and public stigma: Non-significant	

(continued)

Table 5. (continued)

Correlate	Analytic method	Finding	Study
Ethnicity	Regression	Black non-Hispanic > others	DePierro et al. (2021)
	ANOVA	African-American > others	Ceka and Ermasova (2021)
	Mediation model	Significant	
	Regression	Non-significant	Ménard et al. (2016)
			Tucker (2015)
	Correlation	Non-significant	Karaffa and Tochkov (2013)
	Regression		
	Correlation	Self-stigma: Non-White > White	Soomro and Yanos (2019)
		Public stigma: Non-significant	
	Regression	Self-stigma: Non-White > White	
		Public stigma: Non-significant	
	Correlation	Self-stigma and public stigma: Significant	White et al. (2016)
Education	ANOVA	Stigma from fellow officers: Non-significant	
	Regression	Stigma from fellow officers: Non-Caucasian-European < others	
		Self-stigma; stigma from friends and family, supervisors, administration, + mental healthcare providers: Non-significant	
Education	Correlation	Non-significant	Soomro and Yanos (2019)
	Mediation model	Non-significant	Ceka and Ermasova (2021)

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Relationship status	Regression	Non-significant	Copenhaver and Tewskbury (2018)
			DePierro et al. (2021)
	Correlation	Non-significant	Tucker (2015) Karaffa and Tochkov (2013)
	Regression		Karaffa and Tochkov (2013)
	Regression	Married/partnered > others	DePierro et al. (2021)
Number of children	Regression	Non-significant	Ménard et al. (2016)
			Tucker (2015)
	Correlation Regression	Non-significant	Karaffa and Tochkov (2013)
Living with dependent children	Correlation	Positive (10 questions)	Asen and Colón (1995)
		Non-significant (2 questions)	
Military experience	Regression	Non-significant	Ménard et al. (2016)
			Tucker (2015) et al. (2016)

(continued)

Table 5. (continued)

Correlate	Analytic method	Finding	Study
Length of service	Regression	Positive	Daniel and Treece (2022)
	Mediation model	Non-significant	Ceka and Ermasova (2021)
	Regression	Non-significant	Copenhaver and Tewskbury (2018)
			Ménard et al. (2016)
			Tucker (2015)
	Correlation Regression	Non-significant	Karaffa and Tochkov (2013)
	Correlation	Positive (10 questions)	Asen and Colón (1995)
		Non-significant (2 questions)	
	t-test	Senior > junior officers	Lane et al. (2022)
		Non-significant versus >20 years (11-20 years)	

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	Regression	Positive	
	Correlation	Non-significant	Hyland et al. (2012)
	SEM	Positive	
	Correlation	Self-stigma: Positive Public stigma: Significant	White et al. (2016)
	Regression	Self-stigma and public stigma: Non-significant	
Income Active/retired Role	Regression	Non-significant	DePierro et al. (2021)
	Regression	Non-significant	Tucker (2015)
	Regression	Non-significant	Copenhaver and Tewksbury (2018)
			Tucker (2015)
	Correlation	Self-stigma and public stigma: Significant	White et al. (2016)
	ANOVA	Stigma from administration: Patrol > administration	
	Regression	Self-stigma and public stigma: Non-significant	
Rank	Regression	Non-significant	Tucker (2015)
Shift	Regression	Non-significant	Copenhaver (2018) and Tewksbury
Union affiliation	Correlation	Self-stigma: Negative Public stigma: Significant	White et al. (2016)
	Regression	Self-stigma and public stigma: Non-significant	
Demographic factors – Org	anisation		
Agency size	Regression	Negative	Tucker (2015)
	Regression	Non-significant	Daniel and Treece (2022)
	Correlation	Self-stigma: Positive	White et al. (2016)
		Public stigma: Significant	
	Regression	Self-stigma; stigma from friends and family + mental healthcare providers: Positive	
		Stigma from fellow officers, supervisors + administration: Non-significant	

(continued)

Table 5. (continued)

Correlate	Analytic method	Finding	Study
Agency type	Regression	Non-significant	Tucker (2015)
	Correlation	Self-stigma and public stigma: Significant	White et al. (2016)
	Regression	Self-stigma and public stigma: Non-significant	
Community size	Regression	Non-significant	Ménard et al. (2016)
Country	Chi-squared test	Significant	Ménard et al. (2016)
	Regression	Australia < US; New Zealand > US	
Organisational factors			
Police culture			
Distrust of outsiders	Correlation	Negative	Karaffa and Tochkov (2013)
	Regression		
Aggression	Correlation	Non-significant	
	Regression		
Emotional control	Correlation	Non-significant	
	Regression		
Bravery	Correlation	Non-significant	
	Regression		
Autonomy	Correlation	Non-significant	
	Regression		
Secrecy	Correlation	Non-significant	
	Regression		
Identification with police officers	Correlation Regression	Non-significant	Karaffa and Tochkov (2013)
Organisational climate of fear	Regression	Non-significant	Heffren and Hausdorf (2016)
Organisational stress	Correlation	Non-significant	Ceka and Ermasova (2021)
	Mediation model		
	Correlation		

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	Regression	Non-significant	Short (2021)
Perceived organisational support	Regression	Positive	Tucker (2015)
	Regression	Non-significant	Heffren and Hausdorf (2016)
Reciprocal relationship with supervisor	Regression	Non-significant	Heffren and Hausdorf (2016)
Perceived service availability	Chi-squared test	Positive	Carlan and Nored (2008)
	Regression	Positive	Ménard et al. (2016)
Confidence in department's assistance	Correlation	Positive	Ceka and Ermasova (2021)
Perceived existence of police stress policies	Regression s	Non-significant	Tucker (2015)
Having seen EAP policy	t-test	Positive (5 questions)	Asen and Colón (1995)
		Non-significant (7 questions)	
Turnover intentions	Regression	Non-significant	Heffren and Hausdorf (2016)

(continued)

Table 5. (continued)

Correlate	Analytic method	Finding	Study
Experience factors			
Operational stress	Correlation	Non-significant	Short (2021)
	Regression		
Trauma exposure	Regression	Negative	DePierro et al. (2021)
	Regression	Positive	Tucker (2015)
	Regression	Non-significant	Ménard et al. (2016)
Time since trauma	Regression	Non-significant	DePierro et al. (2021)
Past help-seeking	Regression	Positive	Daniel and Treece (2022)
	t-test	Positive	Karaffa and Koch (2016)
	t-test	Positive (4 questions)	Asen and Colón (1995)
		Non-significant (8 questions)	
Use of trauma risk	t-test	Barriers to care and public	Watson and Andrews

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management		stigma: Positive Non-significant	(2018)
Knowing someone with mental health difficulties	Correlation	Self-stigma: Positive	Soomro and Yanos (2019)
	Regression		
	Correlation	Public stigma: Non-significant	
	Regression		
Knowledge factors			
Mental health knowledge Training	Correlation	Positive	Krakauer et al. (2020)
	Correlation	Non-significant	Soomro and Yanos (2019)
	Regression	Non-significant	Tucker (2015)
	t-test	Positive (5 questions)	Asen and Colón (1995)
		Non-significant (7 questions)	
	t-test	MHFA > none	Lane et al. (2022)
		MHRO > none	
		CISM debrief/defuse: Non-significant	
	ANOVA	Both MHFA and MHRO > none	
	Regression	MHFA: Positive	
	MHRO: Non-significant		
	CISM debrief and CISM defuse: Non-significant		
Attitudinal factors			
Overall help-seeking attitudes	Regression	Professional group 1 ^b : Positive	Heffren and Hausdorf (2016)
		Professional group 2 ^b : Non-significant	
	Correlation	Positive	Hyland et al. (2012)
	SEM	Non-significant	
Psychological openness	SEM	Positive	Hyland et al. (2015)
	Regression	Non-significant	Daniel and Treece (2022)
Help-seeking propensity	SEM	Positive	Hyland et al. (2015)
	Regression	Non-significant	Daniel and Treece (2022)
Indifference to stigma	Regression	Positive	Daniel and Treece (2022)

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SEM

Non-significant

Hyland et al. (2015)

(continued)

Table 5. (continued)

Correlate	Analytic method	Finding	Study
Self-stigma (towards help-seeking)	Correlation	Negative	Karaffa and Koch (2016)
	Mediation model		
	Correlation	Negative	Short (2021)
	Regression		
	Regression	Non-significant	Heffren and Hausdorf (2016)
Public stigma (towards help-seeking)	Correlation	Negative	Short (2021)
	Regression		
	Correlation	Negative	Karaffa and Koch (2016)
	Mediation model	Negative, fully mediated by self-stigma	
	Regression	Non-significant	Heffren and Hausdorf (2016)
Confidentiality concerns/ stigma (towards help-seeking) at work	Regression	Negative	Tucker (2015)
Workplace stigma (towards people with mental health difficulties)	Correlation	Negative	Krakauer et al. (2020)
Anticipated risk of help-seeking	Correlation SEM	Self-stigma and public stigma: Negative	Wester et al. (2010)
Anticipated benefit of help-seeking	Correlation SEM	Self-stigma and public stigma: Positive	Wester et al. (2010)
Subjective norms	Correlation SEM	Positive	Hyland et al. (2012)
Perceived help-seeking willingness of colleagues	Correlation Regression	Positive	Karaffa and Tochkov (2013)
Perceived effect on promotion	Correlation	Negative	Ceka and Ermasova (2021)
	Mediation model	Negative, partially mediated by confidence in department's assistance	
Distress disclosure	Regression	Professional group 2 ^b : Positive	Heffren and Hausdorf (2016)

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		Professional group 1 ^b : Non-significant	
Confidence in service providers	Regression	Non-significant	Tucker (2015)
Perpetration of microaggressions	Correlation Regression	Non-significant	Short (2021)
Psychological factors			
Type Achievement-striving A personality Impatience-irritability	Regression	Non-significant	Heffren and Hausdorf (2016)
Neuroticism	SEM	Positive	Hyland et al. (2015)
Psychoticism	SEM	Non-significant	
Extraversion			

(continued)

Table 5. (continued)

Correlate	Analytic method	Finding	Study
Overall perceived behavioural control	Correlation	Positive	Hyland et al. (2012)
Internal control	Correlation SEM	Positive	
External control	Correlation SEM	Positive Non-significant	
Negative coping strategies	Regression	Non-significant	Ménard et al. (2016)
Perceived control of job	Regression	Positive	Copenhaver and Tewksbury (2018)
Overall gender role	Correlation	Self-stigma and public stigma: Negative	Wester et al. (2010)
conflict	SEM 1	Public stigma: Negative, partially mediated by anticipated risk of help-seeking	
	SEM 1	Self-stigma: Negative, fully mediated by anticipated risk of help-seeking	
	SEM 2	Public stigma and self-stigma: Negative direct effect	
Restrictive emotionality	Correlation	Self-stigma and public stigma: Negative	
Restrictive affectionate			

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behaviour between men

Success, power, and competition

Conflict between work and family relations

Correlation

Public stigma: Negative
Self-stigma: Non-significant

Wellbeing factors

Perceived mental health service need

Regression

Negative

DePierro et al. (2021)

Mental health diagnosis

t-test

Positive

Lane et al. (2022)

Regression

Regression

Positive

DePierro et al. (2021)

PTSD symptoms

Regression

Negative

DePierro et al. (2021)

Correlation

Negative

Ménard et al. (2016)

Regression

Likely PTSD

t-test

Negative

Soomro and Yanos (2019)

Regression

Depression symptoms

Regression Regression

Non-significant Non-significant

Jetelina et al. (2020)
DePierro et al. (2021)

Depression symptoms

Regression

Non-significant

DePierro et al. (2021)

Likely depression

Regression

Non-significant

Jetelina et al. (2020)

Depression since joining police

Regression

Non-significant

Copenhaver (2018) and Tewksbury

Likely anxiety

Regression

Non-significant

Jetelina et al. (2020)

Suicide/self-harm ideation
Stress

Regression

Positive

Jetelina et al. (2020)

Regression

Non-significant

Tucker (2015)

Professional quality of life
Compassion satisfaction
Secondary traumatic stress

Regression

Positive

Daniel and Treece (2022)

Burnout

Regression

Non-significant

Psychological quality of life

Correlation

Non-significant

Short (2021)

(continued)

Table 5. (continued)

Correlate	Analytic method	Finding	Study
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Social relationships quality of life	Correlation	Non-significant	Short (2021)
Current resilience	Correlation	Non-significant	Lane et al. (2022)
Perceived change in resilience	Regression	Negative	
Alcohol misuse	Correlation Regression	Negative	Ménard et al. (2016)
	Regression	Non-significant	DePierro et al. (2021)
Alcohol consumption	Regression	Non-significant	Copenhaver and Tewksbury (2018)
			Tucker (2015)
Stimulant drinks per shift	Regression	Non-significant	Copenhaver and Tewksbury (2018)
Fast food consumption	Regression	Non-significant	Copenhaver and Tewksbury (2018)
General health	Regression	Non-significant	Copenhaver and Tewksbury (2018)
			Tucker (2015)
World trade centre-related medical conditions	Regression	Non-significant	DePierro et al. (2021)
Exercise Recreational sports participation	Regression	Non-significant	Copenhaver and Tewksbury (2018)
Sleep	Regression	Positive	Copenhaver and Tewksbury (2018)
Social support	Regression	Non-significant	Heffren and Hausdorf (2016)
			Ménard et al. (2016)
Family support choice for career	Regression	Positive	Tucker (2015)

Note.

^a Asen and Colón (1995) calculated separate correlations for each of 12 questions used to assess help-seeking attitudes.

^b Heffren and Hausdorf (2016) ran separate regressions for help-seeking from professionals at work versus help-seeking from professionals outside of work, but it is unclear which groups the findings relate to. SEM = structural equation modelling; EAP = Employee Assistance Programme; CISM = Critical Incident Stress Management; MHFA = Mental Health First Aid; MHRO = Mental Health Response Officer.

Research question 3: Significant and non-significant correlates

The most consistent finding overall was education, which was not significant in any of six studies. Military experience, organisational stress, alcohol consumption, general health, and social support were all non-significant across two studies each. Past help-seeking was a positive correlate in three studies (albeit not on all help-seeking measures), perceived service availability and having a mental health diagnosis were positive correlates in two studies each, and current PTSD symptoms were a negative correlate in two studies.

Generally, however, very few correlates were consistent across multiple studies. Over two thirds ($n = 73$) were only examined in a single study. For some of the remaining correlates, the effect was always in the same direction but not always found. For example, length of service was a positive correlate in five studies, but non-significant in nine. However, other correlates (e.g. age) demonstrated negative, positive, and non-significant relationships with attitudes towards help-seeking. Therefore, it is difficult to draw firm conclusions regarding the presence and nature of the relationship between help-seeking attitudes and most of the variables examined in the literature thus far.

Discussion

This review aimed to investigate factors which were associated with police officers' attitudes towards seeking psychological support. In total, the review included 21 studies, spanning six countries. Although the studies date back to 1995, almost half ($n = 10$) have been published within the past 5 years, suggesting that this is an area of recent, and continuing, research interest. Overall, 102 correlates of help-seeking attitudes were identified and grouped into eight themes (see Table 5). Past help-seeking, perceived service availability, and having a mental health diagnosis were most consistently associated with more positive help-seeking attitudes, while greater PTSD symptoms were consistently associated with more negative attitudes. However, each of these factors featured in only two or three studies. The most consistent non-significant correlate was education (in six studies). Most correlates showed inconsistent relationships with help-seeking attitudes across studies, or were only examined in one study. This limits the ability to draw clear conclusions regarding the correlates of help-seeking attitudes in police samples. Indeed, this review has highlighted the significant diversity between studies examining this topic. Causes and implications of this diversity will be considered below, alongside considerations for future research.

The first research question related to the operationalisation of help-seeking attitudes across the studies. For study findings to be meaningfully compared, they must assess the same construct. The studies in this review often operationalised help-seeking differently. For example, studies differed in whether the dependent variable was positively or negatively phrased (e.g. 'interest' versus 'stigma'). Whilst it is tempting to view positive and negative views as opposite ends of a spectrum, this may ignore qualitative differences between them. Indeed, stigma and help-seeking attitudes may be associated, but this correlation is far from perfect ($-0.26 \leq r \leq -0.72$; Karaffa and Koch, 2016; Short, 2021), and occasionally non-significant (Heffren and Hausdorf, 2016). Therefore, it is unclear whether the findings from the included studies are directly comparable.

Similarly, the terminology ranged widely regarding help-seeking attitudes (e.g. 'interest' versus 'intention'). These terms seem intuitively to be assessing the same construct. In fact, some authors used them interchangeably (e.g. Ceka and Ermasova, 2021). However, others explicitly distinguished between them. For example, Hyland et al. (2012) found that officers' *intentions* to seek help were associated with their *perceived ability* to seek help but not with their *appraisal of the outcome*. Yet, in other studies, perceived

ability (whether officers felt they *could* use services; Ménard et al., 2016) and appraisal of the outcome (*concerns when asking for help*; Watson and Andrews, 2018) were treated as dependent variables in their own right. Therefore, although all included studies assessed help-seeking attitudes, they may not have measured the same construct.

Furthermore, the provider of support and the reason for help-seeking varied considerably across studies, or were ill-defined. For example, it cannot be assumed that officers will appraise job-related and external assistance similarly. Asen and Colón (1995) found that officers generally thought that Employee Assistance Programmes should not be on site, suggesting a desired separation between work and support. In contrast, qualitative findings indicate that officers fear that mental health professionals will not understand their difficulties (Jetelina et al., 2020; Karaffa and

Tochkov, 2013), in which case policing-based services may be preferred. Similarly, the likelihood of help-seeking may depend on the reason for seeking help. Indeed, some studies found that current distress (e.g. PTSD symptoms) decreased willingness to seek help (DePierro et al., 2021; Ménard et al., 2016). Yet the reason for help-seeking varied widely across the studies and was not always specified. Overall, there is substantial diversity in how help-seeking attitudes were understood, making it difficult to meaningfully compare the studies' findings.

In this context, it is unsurprising that the third research question – which factors correlate with help-seeking attitudes – was difficult to answer definitively. There are several plausible reasons for the inconsistent findings, beyond the different operationalisations of help-seeking attitudes. First, several correlates were operationalised differently across studies. Of both empirical and ethical concern is the dichotomisation of ethnicity by Copenhaver and Tewksbury (2018; African-American versus other) and Tucker (2015; White versus Minority), which obscures diversity within these groups. Second, confounding variables may sometimes have accounted for the results. For example, the positive association between length of service and help-seeking attitudes observed in five studies (e.g. Daniel and Treece, 2022) might have been mediated in Copenhaver and Tewksbury's (2018) study by perceived control of one's job. Mediation analysis could test this in future studies. However, currently it is not possible to state with certainty which factors are associated with help-seeking attitudes among police officers.

Nevertheless, in line with the second research question, it was possible to identify the correlates which have been investigated to date. The fact that the vast majority of correlates were investigated in only one study suggests that studies in this field are being conducted largely independently of one another. Indeed, nine of the included studies are not cited by any other study in the review. Instead, correlates may be chosen to suit the aims and theoretical stance of the individual researchers. This fits with concerns raised generally in psychology that study replication attempts are typically uncommon (Makel et al., 2012). However, this is concerning given evidence that replication tends to find results which are weaker and less likely to be significant than the original (Open Science Collaboration, 2015). Future research should aim to focus on refining pre-existing work in order to produce maximally interpretable findings, which lead to useful intervention targets.

In addition, future studies should address the methodological limitations in many of the existing studies. For example, the studies frequently used unstandardised measures to assess both dependent and independent variables. Moreover, the measures of help-seeking attitudes often consisted of a single question, and/or binary response options. This reduces the validity and reliability of these measures (Field, 2018). In addition, many studies relied on convenience or other non-random sampling methods, which limit the generalisability of the results. For example, Daniel and Treece (2022) advertised their study through a law enforcement Facebook page and Web site, creating the potential for self-selection bias (e.g. participants with positive attitudes towards help-seeking may have been more open to a study on this topic). No studies included a formal power analysis.

Moreover, there may be a more fundamental issue regarding generalisability. According to the AXIS criteria, most studies had a clearly defined population (e.g. the Dallas Police Department; Jetelina et al., 2020). However, many authors referred to 'police officers' generally, implying that their results had national, or even international, relevance that was not necessarily justified. Similarly, some studies used national statistics to assess the representativeness of their sample, yet only recruited participants from a narrow locality (e.g. Texas; Karaffa and Tochkov, 2013). This is problematic because different countries, states, and even agencies may involve very different policing experiences. Indeed, the only international study found significant differences between countries (Ménard et al., 2016). Future studies should be cautious that generalisations made from their findings are justified.

Limitations

This review has some limitations. First, the studies are all from Westernised, English-speaking countries. No relevant non-English-language studies were discovered during the literature search. This is likely largely because the search terms and databases were English-based. Future reviews should broaden the search terms and sources to ascertain whether there is a true lack of global research into police help-seeking attitudes. Similarly, this review only included published, peer-reviewed papers as their quality had been pre-screened through the peer-review

process. Although the many non-significant results reported suggests that publication bias is not an issue (cf. Fanelli, 2012), it would be useful to also review unpublished work to ensure key findings have not been missed.

Second, statistical significance (e.g. $p < .05$) was used to identify correlates of help-seeking attitudes. Statistical significance has been heavily criticised, including for using arbitrary cut-off points, ignoring clinical relevance, and being inconsistent across studies (Halsey et al., 2015; Ranganathan et al., 2015). It was used at this scoping stage for simplicity of interpretation. However, future reviews should consider estimation methods (e.g. effect sizes and confidence intervals) for a more accurate and nuanced analysis of the relationship between help-seeking attitudes and other variables (Claridge-Chang and Assam, 2016).

Third, this study focused on attitudes towards help-seeking, rather than actual help-seeking behaviour, as attitudes were considered more amenable to direct intervention. However, it will be important in future research to investigate whether and how any

influences on help-seeking attitudes translate into behavioural change. Finally, only one reviewer was involved in extracting the data and appraising study quality, which increased the chance of errors (Buscemi et al., 2006).

Conclusion

The primary aim of this scoping review was to investigate the factors which are associated with police officers' attitudes towards seeking psychological support. Across 21 studies, 102 correlates were measured but most were only examined in individual studies. This suggests a lack of unity in the field of police help-seeking research, making it difficult to provide a succinct overview. Past help-seeking, perceived service availability, and having a mental health diagnosis (positive), and current PTSD symptoms (negative) were the most consistent correlates of help-seeking attitudes, while education, military experience, organisational stress, alcohol consumption, general health, and social support were consistently non-significant. However, there was substantial inconsistency among the remaining findings, likely due to differences in the operationalisation of the dependent and independent variables, possible confounding effects, and quality limitations. Therefore, further research is required before any factors can be identified as potential intervention loci. Instead, the overarching finding of this review is the diversity between studies and the need for future research to refine this.

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Appendix: Critical appraisal of included studies

Table A1. Critical appraisal of included studies.

AXIS Criterion	Study																				
	1	2	3	4	5	6	7	8	9	10	11	1 2	13	14	15	16	17	18	19	20	21
Clear aims	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Appropriate design	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample size justified	No	No	Yes	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Population clearly defined	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Representative sample frame	?	No	Yes	Yes	No	No	Yes	No	No	Yes	No	No	Yes	Yes	No	?	No	No	No	No	Yes
Representative sampling strategy	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	?	Yes	Yes	Yes	Yes	No
Consideration of non-responders	No	Some	Yes	Yes	No	No	Some	Some	No	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Appropriate dependent and independent variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Robust measures	No	No	No	No	Some	Some	Some	No	Some	Some	Some	Some	Some	No	Some	Yes	Some	Some	Some	Yes	Yes
Clear indication of significance/precision	Yes	Yes	Yes	Yes	Yes	Some	Some	Yes	Yes	Some	Yes	Yes	Some	Some	Yes	Yes	Some	Yes	Yes	Some	Some
Detailed	Yes	No	Yes	Yes	Yes	Yes	Some	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Some	Yes	Yes	Yes	Yes	Yes

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methods	e s		e s	es	es	es	o m e	es	es	es	s	e s	es	es	es	o m e	es	es	es	es	es
Clear basic data	Y e s	Ye s	Y e s	S o m e	S o m e	Y es	Y es	Y es	Y es	Y es	Ye s	Y e s	Y es	Y es	Y es	S o m e	Y es	Y es	Y es	Y es	Y es

(continued)

Table A1. (continued)

AXIS Criterion	Study																				
	1	2	3	4	5	6	7	8	9	10	11	1 2	13	14	15	16	1 7	18	19	2 0	21
Response rate acceptable	Yes	Yes	?	No	?	?	No	Yes	Yes	Yes	?	?	?	No	?	?	?	No	?	?	?
Non-responders similar	?	No	Yes	?	?	?	Some	No	?	No	No	No	?	?	No	?	Yes	Yes	Some	Some	Some
Internally consistent results	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
All results presented	No	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	?	No	Yes	Yes	Yes	Yes	Yes
Appropriate discussion/ conclusions	Some	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Some	Some	Yes	Yes	Yes	Some	Some	Yes	Yes	Yes	Yes	Some
Limitations discussed	No	Some	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Free from conflicts of interests	?	?	?	?	Yes	Yes	?	?	?	Yes	?	?	Yes	Yes	?	Yes	?	?	?	?	?
Ethical approval/ participant consent	?	?	Yes	Yes	Yes	Yes	?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	?

Note. The critical appraisal criteria in this table are taken from the AXIS tool (Downes et al., 2016). A question mark (?) indicates that the answer was unclear or could not be determined. Only methods and findings relevant to the aims of the current review were critically appraised. 1 = Asen and Colón (1995); 2 = Carlan and Nored (2008); 3 = Ceka and Ermasova (2021); 4 = Copenhaver and Tewksbury (2018); 5 = Daniel and Treece (2022); 6 = DePierro et al. (2021); 7 = Heffren and Hausdorf (2016); 8 = Hyland et al. (2012); 9 = Hyland et al. (2015); 10 = Jetelina et al. (2020); 11 = Karaffa and Tochkov (2013); 12 = Karaffa and Koch (2016); 13 = Krakauer et al. (2020); 14 = Lane et al. (2022); 15 = M'enard et al. (2016); 16 = Short (2021); 17 = Soomro and Yanos (2019); 18 = Tucker (2015); 19 = Watson and Andrews (2018); 20 = Wester et al. (2010); 21 = White et al. (2016).