

Confirmation Bias in Law Enforcement and How Debiasing Interventions and Mitigation Strategies Might Help Rebuild Public Trust: A Thematic Review

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Abstract: *Purpose.* This thematic review examines how confirmation bias impacts decision-making and investigative outcomes in law enforcement, aiming to identify strategies to mitigate these effects. By synthesizing the existing research, this work highlights the challenges of confirmation bias and proposes practical interventions to improve fairness and accuracy in policing. *Methods.* Text and abstract searches were conducted using Google Scholar, Hein Law Journal Library, and the Ehrhorn Law Library. The focus was on the studies examining decision-making, investigative outcomes, and methods to mitigate biases in law enforcement practices. This review followed the established thematic review methodologies. *Results.* The literature search produced a variety of qualitative and quantitative studies. The impact of confirmation bias on decision-making, its effects on investigative outcomes, effective mitigation strategies, the role of organizational culture, and its influence on community relations were themes identified after analysis. *Conclusions.* This review shows the need for thorough research to validate the effectiveness of strategies designed to mitigate confirmation biases in law enforcement. Future studies should include a longitudinal focus on the impact of debiasing techniques, training programs, and organizational changes. *Application in Law Enforcement.* For law enforcement agencies, implementing targeted training programs, debiasing techniques, and decision-making models might improve equity and fairness concerning law enforcement practices. Addressing confirmation bias enhances investigative outcomes, builds community trust, and reinforces fairness when applying the law. Law enforcement agencies should consider adopting the strategies discussed in this review to promote more effective and ethical policing practices.

Keywords: law enforcement, police, military, personal protective equipment, ballistic vest.

INTRODUCTION

Confirmation bias can cause significant problems in law enforcement through faulty evidence interpretation and decision-making processes. In examining how confirmation bias can impact law enforcement, this review examines a critical issue that affects policing practices. According to Dror (2020), confirmation bias is the tendency to seek, interpret,

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and remember information that confirms pre-existing beliefs and significantly influences decision-making processes. Elaad (2022) further asserts that this bias shapes how officers gather and assess evidence, which often leads to skewed judgments.

Although cognitive biases, such as confirmation bias, have long been studied in psychology, their specific influence on law enforcement practices has gained attention over the last few decades. Current research suggests that systematic strategies are needed to counterbalance confirmation bias in police work (Fahsing et al., 2023). This study is timely because public trust in law enforcement is constantly scrutinized. This review attempts to understand confirmation bias through qualitative and quantitative studies; it also proposes effective mitigation strategies and discusses areas for further research. Rassin (2020) submits that bias affects policing practices such as proper evidence interpretation and fair decision-making, which impact community relationships. Understanding confirmation bias is important to advance policing practices. According to Lidén (2023), officers operate under great stress, and cognitive biases can worsen during decision-making. Schlosser et al. (2021) discussed that findings from such studies could be used to create more fair and effective law enforcement practices, thereby fostering better community relations.

Rossmo and Pollock (2019) noted that wrongful convictions have always involved some level of confirmation bias. For example, they studied the 1989 “Central Park Five” case in which prosecutors wrongfully convicted five young black men of sexually assaulting a white woman based on coerced confessions and a biased investigation by the New York City Police Department. One of the main risks of confirmation bias is when investigators focus too much on supporting initial assumptions while ignoring contradictory evidence. Doing so may result in catastrophic mistakes based on unfair judgments against innocent individuals. Over the years, high-profile wrongful conviction cases, like the “Central Park Five”, have brought attention to the importance of addressing cognitive biases in policing practices.

Confirmation bias influences social factors like the relationship between racial profiling and community relations in law enforcement. Chanin et al. (2018) assert that this kind of bias further marginalizes some groups, making it easy for officers to suspect individuals based on factors other than objective evidence, thus treating them as potential criminals based on where they live. Such biased interpretations contribute to what some argue are disproportionate targeting of minority communities. Furthermore, when officers act on pre-existing stereotypes, they are more likely to stop, search, and arrest individuals from these communities without substantial evidence. Chanin et al. (2018) assert that this practice undermines trust between law enforcement and the communities they serve. Therefore, addressing confirmation bias is essential to foster fair and equitable law enforcement practices that build rather than undermine community trust.

According to Oswald and Grosjean (2004), confirmation bias is rooted in psychological theories of cognition and decision-making. It emphasizes how heuristics (mental shortcuts) and social influences shape our judgments. Researchers like Dror (2020) and Tversky and Kahneman (1974) examined how biases affect decision-making and reasoning. For law enforcement leaders, understanding the theoretical constructs of confirmation bias is essential to develop effective mitigation strategies to combat biases in policing. Integrating cognitive and social psychological theories can help police training administrators design curricula that promote critical thinking and reduce reliance on biased heuristics.



Halpern and Dunn (2021) assert that law enforcement officers may rely on intuitive judgments under time pressure, which may trigger mental shortcuts and may lead to biased decisions. Furthermore, the role of organizational culture in shaping cognitive processes is equally critical, which adds to the discussion concerning the need for systemic changes to mitigate biases (Moseley & Thomann, 2021). Peters (2022) suggests that theories of motivated reasoning and social identity can explain how personal and group affiliations influence evidence interpretation, which exacerbates the complexities of decision-making processes.

Understanding and addressing confirmation bias is essential for improving policing practices, ensuring fair treatment, and strengthening community relations. Confirmation bias influences how officers interpret evidence and make decisions, and doing so can lead to unjust outcomes and erode public trust in the administration of justice (Dror, 2020). This review aims to emphasize confirmation bias's impact on law enforcement practices by shedding light on the effects of this cognitive bias. Furthermore, addressing confirmation bias is vital for fostering a more equitable justice system (Fahsing et al., 2023). This review endeavors to provide law enforcement leaders with insights into effective mitigation strategies that enhance the objectivity and fairness of policing practices. Schlosser et al. (2021) assert that by implementing systematic debiasing strategies, law enforcement can improve decision-making processes, reduce wrongful convictions, and build stronger communities. By synthesizing various studies, this review investigates Hill et al.'s (2008) attestation of how confirmation bias impacts investigative outcomes and community relations. This review also highlights Chanin et al.'s (2018) work in which they discuss the pervasive nature of confirmation bias and its negative effects on law enforcement. This review addresses today's actual or perceived lack of fairness in policing practices and the general administration of justice.

The objective of this thematic review is to (1) examine the effects of confirmation bias on law enforcement decision-making, (2) analyze its effect on investigative outcomes, (3) investigate its impact on community relations, and (4) identify mitigation strategies.

METHODS

This study's protocol was developed using a structured methodological framework. The protocol consisted of several stages detailing the search strategy and steps of the review process including identifying and collecting relevant data, selecting relevant studies, charting the data, and summarizing and synthesizing the results.

Literature searches were conducted across three electronic databases (Google Scholar, Hein Law Journal Library, and the Ehrhorn Law Library) to identify and collect relevant studies. An initial search using the search terms "confirmation bias", "law enforcement", "policing", "cognitive bias", and "criminal investigation" was conducted. This search established key search terms to conduct additional searches across the databases. The collected literature was then screened for relevance to the research question. After removing duplicates, studies were assessed for eligibility. Reference lists of eligible studies were further screened for additional relevant studies.



To select relevant studies, inclusion and exclusion criteria were established to filter and guide searches for relevant literature. To be selected, literature had to meet the following criteria: (i) be from a peer-reviewed journal, a conference presentation, or a published thesis; (ii) published in the English language; (iii) include documented interventions or analysis related to confirmation bias in law enforcement; and (iv) be quantitative or qualitative. The literature was not restricted by time frame, study population, geographical location, or type/design of journal article. One colleague analyzed conflicting literature to reach a consensus for inclusion. Two reviewers, one of whom was the author/principal investigator, screened the articles for selection by applying the eligibility criteria. Blinding was applied at this stage to ensure no bias between reviewers in the selection process. All conflicts between the two reviewers generated through screening were discussed to reach a consensus. Initially, articles were selected from the title and abstract screening. A second, more in-depth selection was then conducted through full-text screening.

Once articles were selected, the data were charted according to author, title, journal, publication year, geographical location, purpose, sample size and type, methodology, intervention type, outcomes, key findings, and barriers. The author/principal investigator extracted and grouped the data, and a reviewer validated the data to ensure accuracy. The data were organized and grouped into subtopics according to the identified study purposes: (i) impact on decision-making; (ii) effects on investigative outcomes; (iii) influence on community relations; and (iv) strategies to mitigate confirmation bias.

Finally, the results were summarized and synthesized. Descriptive statistics was used to describe the reviewed literature and identify the areas that have been widely researched but have not been given much attention. Trends across geographic locations and decades of publication of included studies were evaluated. The results from the studies were examined by theme to discover what patterns, if any, existed or if any similarities could be detected among the different findings. Some barriers and gaps were detected, and suggestions were made for potential future research. A consensus was reached between the author/principal investigator and a reviewer regarding the critical information generated from the review.

Although not required for thematic reviews, the author/principal investigator, in addition to the structured methodological framework, followed the PRISMA guidelines for conducting and reporting scoping and systematic reviews. No risk of bias assessment, summary measures, or additional analyses were conducted in this review, and no formal review protocol exists.

RESULTS

The initial search from the three electronic databases yielded 117 articles and books. After removing duplicates and screening for confirmation bias in law enforcement relevance, the results were narrowed to 32 sources. These 32 sources were retrieved and reviewed in detail. The reference lists of these studies were further screened for additional relevant sources, but no new sources were added. Full-text access was obtained for all 32 records, and after the initial screening of titles and abstracts, all 32 fit the inclusion criteria.



The studies were grouped into four main thematic areas: (1) impact on decision-making, (2) effects on investigative outcomes, (3) influence on community relations, and (4) strategies to mitigate confirmation bias.

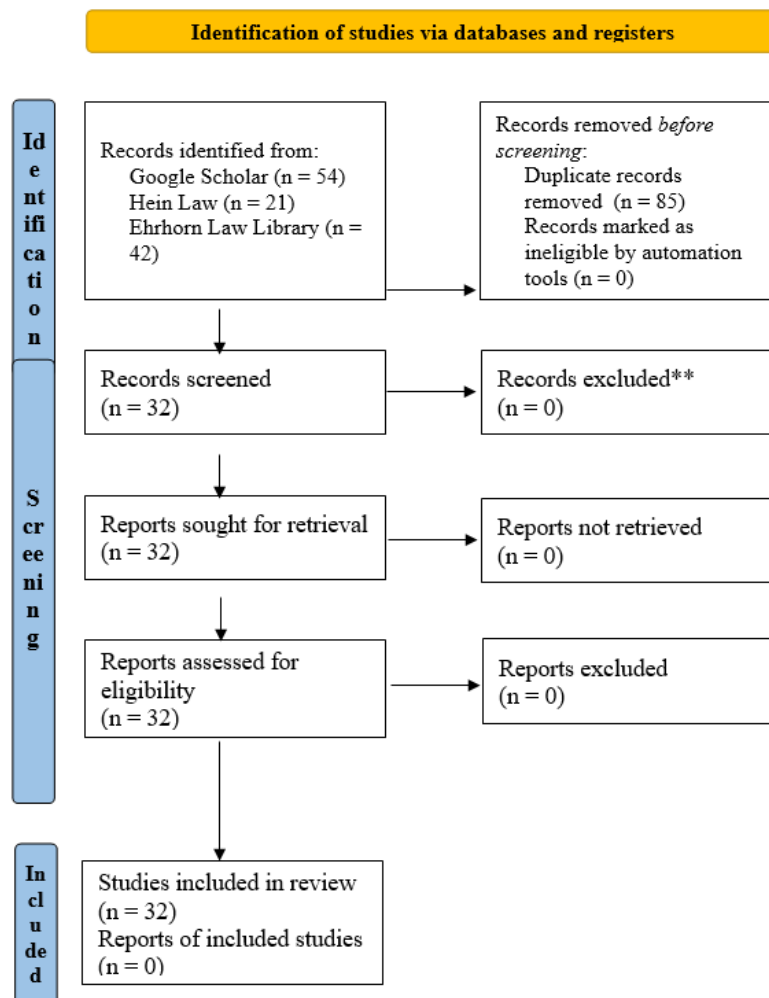


Figure 1. PRISMA 2020 Flow Diagram: Overview of the study identification and selection process

- 1) **Impact on Decision-Making.** Studies consistently showed that confirmation bias affects how officers interpret and prioritize evidence. Dror (2020) found that officers often give more weight to evidence that confirms their initial suspicions, leading to skewed decision-making processes. This bias can result in overlooking or undervaluing exculpatory evidence and compromise investigations. In addition, Hill et al. (2008) showed that confirmation bias can cause investigators to follow wrong leads and divert police resources. This misallocation of resources can delay the pursuit of an actual suspect(s) and increase taxpayer costs. Addressing confirmation bias is critical for enhancing the accuracy and efficiency of police investigations. Table 1 shows the six fallacies and eight sources of bias in decision-making from Dror's (2020) work.

Table 1. *Fallacies and Bias Sources*

CATEGORY	TYPE	DESCRIPTION
Fallacies	Illusion of Control	Overestimating one's ability to control or influence outcomes.
	Overconfidence	Excessive belief in one's own abilities or judgments.
	Confirmation Bias	Seeking information that confirms the pre-existing beliefs.
	Availability Heuristic	Relying on immediate examples that come to mind.
	Anchoring	Relying too heavily on the first piece of information encountered.
	Groupthink	Conforming to group opinions for harmony or conformity.
Sources of Bias	Contextual Bias	Influences from irrelevant external factors.
	Expectation Bias	Interpreting information in a way that fits expectations.
	Motivational Bias	Driven by personal or external motivations.
	Selective Attention	Focusing on specific aspects while ignoring others.
	Cognitive Dissonance	Holding conflicting beliefs or attitudes.
	Fundamental Attribution Error	Overemphasizing personal characteristics over situational factors.
	Bias Blind Spot	Recognizing biases in others but not in oneself.
	Memory Bias	Recollection influenced by the current beliefs and attitudes.

*Officers' height measures were taken on the first day only.

- 2) **Effects on Investigative Outcomes.** Research showed that confirmation bias contributes to investigative missteps and wrongful arrests. Rossmo and Pollock (2019) discussed cases in which confirmation bias led investigators to pursue leads that resulted in unreasonably prolonged investigations, wrongful arrests, and convictions. Furthermore, Rassin (2020) found that systematic biases in evidence interpretation could lead to repeated investigative failures. Table 2 shows the different cognitive biases that impact investigative outcomes based on the findings from Rossmo and Pollock's (2019) and Rassin's (2020) studies. The table shows the relationship between various biases and their effects on investigative missteps, systematic biases, justice system integrity, and mitigation.



Table 2. Relationship Between Cognitive Biases and Investigative Outcomes

	Investigative Missteps	Systematic Biases	Justice System Integrity	Mitigation
Confirmation Bias	✓	✓	✓	✓
Contextual Bias		✓	✓	
Expectation Bias	✓		✓	
Motivational Bias		✓		✓
Selective Attention	✓		✓	
Cognitive Dissonance		✓		
Fundamental Attribution Error	✓		✓	
Bias Blind Spot		✓	✓	
Memory Bias	✓	✓		

- 3) **Influence on Community Relations.** A decay in community relations is a result of discriminatory practices sustained by confirmation bias. Chanin et al. (2018) concluded that biased policing practices disproportionately target minority communities and erode trust between law enforcement and their communities. In addition, Schlosser et al. (2021) assert that efforts to build community policing strategies often fail when confirmation bias is not addressed because biased behaviors reinforce stereotypes and perpetuate tensions. The following flowchart (Figure 2) shows the progression of confirmation bias and how it affects community relations.

**Figure 2.** Bias Progression on Community Relations

- 4) **Strategies to Mitigate Confirmation Bias.** Studies propose various strategies to address confirmation bias in law enforcement. Fahsing et al. (2023) discussed the importance of training programs that increase awareness of cognitive biases and promote critical thinking skills. In addition, implementing systematic debiasing techniques, such as considering alternative hypotheses and peer reviews, can help reduce the impact of confirmation bias on decision-making. Moreover, Glaser (2024) suggested integrating bias awareness training into routine law enforcement training to create long-term cultural change within agencies. These strategies can improve fair and equitable investigations, which may foster public trust. The following hierarchical diagram (Figure 3) illustrates the strategies to mitigate confirmation bias and their impact on law enforcement.

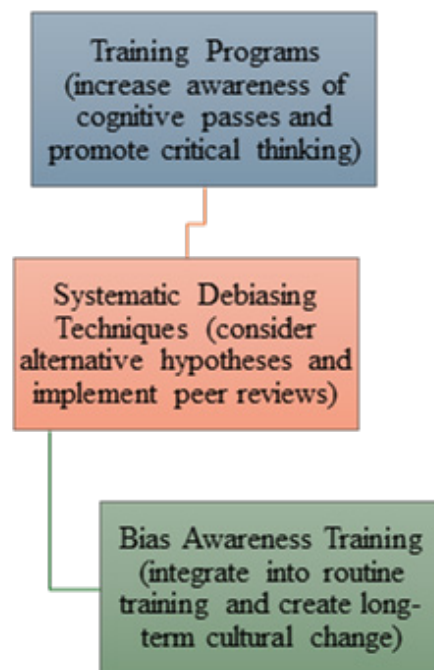


Figure 3: Confirmation Bias Mitigation Strategies

This review identified gaps in the literature, particularly in empirical studies evaluating the effectiveness of debiasing strategies. Future research should focus on developing and testing interventions aimed at mitigating confirmation bias in real-world policing contexts.

NARRATIVE REVIEW

This review examined confirmation bias in a law enforcement context and the underpinning theoretical framework while synthesizing the related works. This review analyzed empirical studies and theoretical discussions to understand how confirmation bias affects decision-making processes, policing outcomes, and community relations. The literature discusses how confirmation bias can compromise the integrity of investigations, lead to wrongful convictions, and undermine community-police relations. Studies from the lit-

erature discussed mitigation strategies and debiasing interventions that aim to improve public trust and policing practices. By synthesizing the existing research, this review aimed to identify practical interventions and highlight the areas needing further exploration because addressing confirmation bias is critical for ensuring fair and accurate law enforcement practices. The approach this review takes seeks to link theory with practice, thereby paving the way for training and policy development to counter actual or perceived confirmation bias in law enforcement.

THEORETICAL FRAMEWORK

The dual-process theory, discussed and popularized by Daniel Kahneman and Amos Tversky, served as the theoretical framework for this review's understanding of confirmation bias in law enforcement. This theory suggests that human cognition operates in two ways: "System 1", which is intuitive and fast, and "System 2", which is analytical and slow (Stanovich & West, 2000). Understanding the relationship between these two systems is critical for addressing confirmation bias in law enforcement.

Law enforcement officers often operate under conditions that favor System 1. This makes officers open to confirmation bias because they sometimes need to make quick decisions under high-pressure situations. These high-pressure situations often lead them to rely on instinctive and automatic responses they have previously experienced or that they learn in training. System 1 can lead to selective information processing. According to Kahneman (2011), this process is when initial suspicions are given more weight than contradicting evidence.

To mitigate confirmation bias in law enforcement, leaders should consider strategies that focus on enhancing System 2 thinking. Training administrators charged with developing decision-making curricula should design modalities that emphasize System 2 processes that promote critical thinking and awareness of cognitive biases. They might also consider implementing structured decision-making models that promote systematic evidence reviews. Fahsing et al. (2023) discuss the importance of systematic debiasing strategies, like training programs that promote cognitive bias awareness and critical thinking skills. In addition, Lilienfeld et al. (2009) state that cognitive debiasing techniques, such as scenario-based training and reflective practice sessions, have proven to help officers recognize and counteract their inherent biases, resulting in more balanced and objective outcomes.

This review grounds itself in dual-process theory to emphasize understanding the cognitive mechanisms that might trigger confirmation bias. Dual-process theory might also have utility in developing practical interventions to mitigate the effects of confirmation bias in law enforcement. This theoretical framework might be helpful to scholars and practitioners examining the impact of confirmation bias on law enforcement practices. Their future work could ultimately improve the accuracy and fairness of policing practices.

RELATED LITERATURE: IMPACT ON DECISION-MAKING

The literature regarding how confirmation bias influences law enforcement decision-making is widely available. According to Lehner et al. (2008), many studies have shown that



people tend to process information that confirms their experiences due to confirmation bias. Such a predisposition may distort how officers interpret evidence, thus resulting in policing missteps. For instance, forensic scientists might unintentionally be biased towards any evidence that supports a prosecutor's case (Dror, 2020). Addressing confirmation bias requires interventions that promote an objective review of all evidence, regardless of anecdotal beliefs. One such intervention strategy could be training programs that focus on critical thinking and skepticism. Hill et al. (2008) suggest that these training programs can help mitigate the impact of biases on decision-making. Another intervention strategy is cultural change. By fostering a culture of data-driven, evidence-based decision-making, law enforcement agencies can enhance the accuracy and fairness of their practices. Moreover, according to Fahsing et al. (2023), integrating structured decision-making models, like peer review or other verification processes, can further reduce the influence of biases that ensure a balanced and thorough review of all available evidence before drawing a conclusion.

Dror (2020) suggests that experts, regardless of their profession, including law enforcement officers, often give excessive weight to evidence that confirms their initial suspicions. This practice leads to skewed decision-making processes and often results in unfair outcomes. For example, officers might miss exculpatory evidence, finding themselves in a “fruits of the poisonous tree” scenario that could potentially compromise the integrity of their investigation. Confirmation bias is not just individual failings but is reinforced by systemic factors like organizational culture and procedural practices (Rassin, 2020). Systematic changes at the organizational level, including policies that require decision-making audits, can further support the reviews concerning the objectivity of officers and how they interpret evidence (Meterko & Cooper, 2022).

According to Hill et al. (2008), confirmation bias can cause investigators to pursue incorrect leads, waste time and resources, and potentially make a wrongful arrest. Their study underscores the need for decision-making frameworks that reduce the impact of personal biases on investigative processes. For example, they discuss how blind verification processes can help ensure investigators remain open to multiple hypotheses. Blind verification processes include context isolation, independent reviews, avoiding leading information, and quality control (Hill et al., 2008). Such models promote rigorous evaluation of evidence, reducing the risk of bias-driven errors (Cooper & Meterko, 2019). Integrating these models into standard policing practices can help create a culture of objectivity. Structured frameworks can serve as guardrails against biases that might stray investigators. Ensuring that these frameworks are consistently applied could enhance the quality of investigative outcomes, thereby promoting improved public trust in law enforcement. Lidén (2023) asserts that routine training and reminders on these models can help maintain the standards of evidence collection, which helps mitigate the impact of confirmation bias.

A study by Fahsing et al. (2023) showed that awareness training can mitigate some of these biases by promoting critical thinking and encouraging officers to consider alternate hypotheses. Their findings support integrating cognitive debiasing strategies in law enforcement training programs. For example, scenario-based training and reflective practice sessions help officers recognize and counteract their biases, leading to more objective decision-making. Scenario-based training and reflection have improved one's ability to evaluate actions and avoid cognitive traps (Powell et al., 2012). Implementing these strategies



systemically can have a transformative impact on law enforcement practices. Equipping officers with the tools to identify and counteract their biases can enhance police practices. O'Brien (2007) found that incorporating feedback mechanisms that allow officers to reflect on their decision-making processes can reinforce learning and improve policing practices. Furthermore, Lino (2021) affirms that the effectiveness of these types of training programs highlights the importance of ongoing education and professional development in mitigating cognitive biases.

EFFECTS ON INVESTIGATIVE OUTCOMES

Confirmation bias significantly affects investigative outcomes, often leading to errors and a misapplication of the administration of justice. Understanding these effects is essential for strategies that improve investigative practices and ensure fairness. Researchers have documented numerous cases in which confirmation bias has resulted in skewing evidence, pursuing incorrect leads, and ultimately, making wrongful arrests. According to Scherr et al. (2020), these outcomes not only affect the wrongfully arrested but also undermine public confidence in the criminal justice system. For example, Rossmo and Pollock (2019) analyzed several high-profile cases in which confirmation bias was a key element in overturning those cases. Two of the cases they analyzed included the previously mentioned “Central Park Five” in 1989 and the “West Memphis Three” in 1993, a case involving three teenagers accused of murdering three boys in West Memphis, Arkansas. Records showed that the police focused on the accused because of their appearance and interest in them rather than solid evidence. Ultimately, the accused were released after DNA evidence proved their innocence. Staller et al. (2022) assert that implementing training, policy changes, and continuous monitoring of investigative practices can enhance the reliability and fairness of law enforcement investigations, and strengthen the overall integrity of the criminal justice system. In addition, Wallace (2015) suggested independent oversight bodies review and evaluate investigative processes as an extra layer of accountability to further reduce the risk of biased outcomes.

Systematic biases also play a role in investigative outcomes. Rassin (2020) found that systematic biases in evidence interpretation have led to investigative failures and recommended improved protocols and training to address cognitive biases. For example, Rassin's work discussed the importance of adopting standardized procedures, like double-blind evidence reviews and using checklists, to minimize bias. These procedures can serve as effective tools against cognitive biases and ensure that all evidence is evaluated on its merits. By standardizing investigative protocols, law enforcement agencies can reduce the variability and subjectivity that can lead to biased outcomes. Furthermore, O'Donohue and Cirlugea (2021) suggest that incorporating technological solutions, like automated evidence management systems, can help reduce human error and bias in evidence handling and interpretation.

Preconception and discrimination are pitfalls associated with confirmation bias. Schlosser et al. (2021) concluded that confirmation bias in policing practices can perpetuate discriminatory behaviors. Their study focused on community policing, which is a strategy that involves partnering with communities to address policing issues. It also considered how these methods influence cognitive biases toward police behavior. For example,



Schlosser et al. (2021) showed that sometimes racial profiling occurs as a result of biased attitudes among officers. Racial profiling exacerbates the already existing animosities between minority communities and police. Accordingly, the Schlosser et al. study suggests counteracting such preconceptions to improve community relations and to ensure fairness in enforcement activities.

Law enforcement leaders can improve transparency by creating feedback loops between their officers and their communities. Agencies can foster close ties with their communities through open communication in which residents freely express their concerns regarding public safety matters (Staller et al., 2022). Moreover, developing community-based policing approaches that consider empathy and cultural diversity may minimize the effects caused by biases in police work. Lidén (2023) states that these programs enable officers to gain insights into various societal needs, promoting fairer policing practices.

INFLUENCE ON COMMUNITY RELATIONS

Confirmation bias also impacts community relations, and researchers submit that actual or perceived bias has decayed public trust and collaboration between police and their communities. These studies also imply that unfair policing methods single out minority communities. One study by Chanin et al. (2018) found that biased policing practices targeting minority communities and causing public mistrust supports this implication. One finding from their study was that addressing confirmation bias is crucial in reestablishing trust and partnership between police and the public. The Chanin et al. study gave examples from various jurisdictions where biased policing has strained relationships with community members and decreased collaboration among them. In addition, their findings showed that developing policies can enhance transparency and accountability and promote trust between law enforcement agencies and their communities. According to Staller et al. (2022), creating forums for dialogue and feedback between police officers and community members can help deal with policing concerns while establishing strong relationships.

Another method to improve relations with the community is integrating debiasing interventions into training and organizational culture. Glaser (2024) noted that changes in organizational culture through debiasing interventions into regular police training can be a pathway to improved community relations. Glaser's study revealed that when officers have the training to recognize and manage their biases, they are more likely to engage in fair and impartial policing. The research provided examples of successful training programs that improved community relations while recommending that debiasing interventions become routine in all police training curriculums. For law enforcement leaders, implementing these programs can create a more inclusive and equitable policing culture.

Furthermore, from an effective workforce perspective, bias awareness training promotes a competent and accountable work culture where officers can navigate routine duties through continuous education and professional development. Fostering a culture of accountability within a law enforcement agency can reinforce the lessons learned from bias training. According to Klayman (1995), this approach can lead to a more consistent and just application of the law.



Law enforcement leaders should consider recognizing cognitive biases in their strategies and practices. Schlosser et al. (2021) found that policing strategies cannot be effective if leaders do not address confirmation bias. Their study proposes community-based reforms through systematized debiasing interventions. They discuss how biases can undermine community policing efforts and how these biases lead to mistrust and an erosion of the police-community partnership. Another recommendation made by Schlosser et al. (2021) is integrating community feedback into policing strategies. Doing so can help identify and mitigate biases, and implementing these strategies can promote transparency and accountability. Promoting agency diversity can help address actual or perceived systemic biases and improve community relations. According to Knobloch-Westerwick et al. (2020), ensuring law enforcement agencies reflect their communities encourages greater understanding and trust.

MITIGATION STRATEGIES

Mitigating confirmation bias in law enforcement requires comprehensive approaches that address individual cognitive processes and organizational practices. The literature identifies several potentially effective strategies to combat these biases. They emphasize the importance of targeted training programs, cognitive debiasing techniques, and structured decision-making models.

According to Fahsing et al. (2023), scenario-based training and reflection sessions can enhance critical thinking and minimize cognitive biases in criminal investigations. Such training necessitates evaluative thinking when interpreting evidence and objective decision-making based on facts. Reflection sessions require officers to discuss decision-making with trainers while examining alternative views or choices. These models can be instrumental if trainers develop a curriculum that makes officers recognize their biases and know how to suppress them to make impartial decisions. Moreover, engaging in these practices helps an officer develop an unbiased assessment of evidence, which is necessary for ensuring the integrity of the investigative process and the preservation of the chain of evidentiary custody. The Fashing et al. study showed that this type of training could reduce initial suspicions that do not have support and encourage consideration of various hypotheses that might.

Studies have shown that confirmation bias is most commonly found during the interview and interrogation process. Powell et al. (2012) examined the significance of skillful interviewing methods and their relationship to minimizing this cognitive bias. Good interviewing techniques encourage the consideration of alternative explanations and facilitate objective evidence collection. For example, asking open-ended rather than suggestive questions may increase the actual or appearance of impartiality when interviewing suspects. This approach ensures that investigators remain open to different theories of a crime and do not focus on a single suspect or theory without objective, supporting evidence. Furthermore, implementing structured decision-making models, like blind verification processes in forensic investigations, further supports open-mindedness by ensuring that investigators evaluate evidence without prejudice or preconceptions. Hill et al.'s (2008) study on confirmation bias in suspect interviews showed that these models can promote a more rigorous evaluation of evidence and reduce the risk of bias-driven mistakes.



Several surveys, including a 2022 Gallup Poll on the public perceptions of police (Gallup, 2023), showed that society accepts that law enforcement officers are human beings with good intentions doing a tough job. Meterko and Cooper (2022) propose that awareness training programs that focus on recognizing and countering human biases can be highly effective. These programs typically include modules on cognitive biases and their impact on decision-making. Moreover, implementing such programs industry-wide can be a transformative approach to advancing law enforcement practices by embedding critical thinking into daily routines. As previously discussed, feedback loops reinforce these debiasing interventions and ensure their long-term effectiveness.

NARRATIVE REVIEW SUMMARY

The literature highlights the impacts of confirmation bias on decision-making and police practices in law enforcement. This bias affects the different areas of policing and can compromise the integrity of investigations and prosecutorial outcomes. The literature discusses mitigation strategies like targeted training programs to improve critical thinking and bias awareness, cognitive debiasing modalities such as scenario-based training and reflection sessions, and structured decision-making models. These strategies might have utility in enhancing decision-making, promoting fairness, and reinforcing community trust. Addressing confirmation bias requires a comprehensive approach that incorporates individual and organizational changes to advance critical thinking and accountability. Implementing these strategies can improve policing outcomes and build stronger relationships with communities.

THEMES

Multiple themes emerged from this review. The author/principal investigator identified and categorized these themes, and studies were grouped into key categories related to law enforcement and confirmation bias. Most studies produced one specific theme within the context of confirmation bias while acknowledging others to a lesser degree; however, some overlap of themes emerged in studies. Table 3 groups all studies by theme, variable, citation, and geographical region.

Table 3. *Summary of Themes, Variables Assessed, and Studies by Geographical Region*

Theme	Variable(s) Assessed	Studies	Geographical Region
Decision-Making	Cognitive processes, evidence evaluation	Dror (2020); Hill et al. (2008)	UK, USA
Investigative Outcomes	Wrongful convictions, resource wastage	Rossmo & Pollock (2019); Rassin (2020)	Europe, USA
Community Relations	Trust, cooperation, minority targeting	Chanin et al. (2018); Schlosser et al. (2021)	USA
Mitigation Strategies	Training programs, debiasing techniques	Fahsing et al. (2023); Powell et al. (2012)	Australia, Europe



FINDINGS

The findings from this review highlight the impact of confirmation bias on decision-making and outcomes in police practices. The studies show that confirmation bias skews evidence interpretation and leads to missteps such as wrongful arrests. Confirmation bias influences the prioritization of evidence and decision-making processes (Dror, 2020; Rossmo & Pollock, 2019) and impacts the police/community relationship (Chanin et al., 2018). Therefore, addressing the issue of confirmation bias in police practices is essential for ensuring the fair application of the administration of justice (Fahsing et al., 2023).

The studies were grouped into four main thematic areas: (i) decision-making, (ii) investigative outcomes, (iii) community relations, and (iv) mitigation strategies.

- 1) **Decision-Making.** Studies showed that confirmation bias significantly impacts officers' decision-making processes. Dror (2020) found that officers often prioritize evidence that confirms their initial suspicions, leading to skewed decision-making, while Hill et al. (2008) demonstrated that this bias can cause investigators to follow incorrect leads. Both waste resources and potentially result in wrongful arrests. Fahsing et al. (2023) emphasized the importance of training programs to enhance critical thinking and reduce the influence of cognitive biases on decision-making.
- 2) **Investigative Outcomes.** The literature suggested that confirmation bias contributes to investigative errors and wrongful convictions. Rossmo and Pollock (2019) highlighted high-profile cases, such as the "Central Park Five", in which confirmation bias led to wrongful convictions. Meanwhile, Rassin (2020) underscored the need for improved protocols and training to address systematic biases in evidence interpretation. In addition, Scherr et al. (2020) noted that these biases not only affect individual cases but also undermine the integrity of the criminal justice system.
- 3) **Community Relations.** Confirmation bias negatively impacts community relations, particularly through biased policing practices. Chanin et al. (2018) found that biased practices disproportionately target minority communities and, as a result, decay trust between law enforcement and these communities. Schlosser et al. (2021) asserted that addressing confirmation bias is important for building effective community policing strategies. Improved officer conduct resulting from debiasing interventions can enhance public perception and foster stronger community partnerships.
- 4) **Mitigation Strategies.** Various strategies were discussed in the literature to address confirmation bias in law enforcement. In one example, Fahsing et al. (2023) discussed the importance of training programs that increase awareness of cognitive biases and promote critical thinking skills. In another example, Glaser (2024) suggested integrating bias awareness training into routine law enforcement training to create long-term cultural change within agencies. These strategies can improve fairness and equity in investigations, fostering public trust.



DISCUSSION

The findings from this review highlight mitigation strategies to address confirmation bias in law enforcement. These strategies emphasize targeted training programs, cognitive debiasing techniques, and structured decision-making models. Specifically, scenario-based training, reflection exercises, and double-blind evidence reviews are critical interventions designed to improve decision-making processes, enhance investigative outcomes, and foster better community relations (Fahsing et al., 2023). These models help officers recognize and combat their biases while promoting critical thinking, reviewing evidence objectively, and remaining open to multiple hypotheses, which helps reduce the influence of initial biases on their decisions.

These findings align with dual-process theory and underpin much of the discussion on confirmation bias in decision-making. The theory suggests that confirmation bias could stem from fast, intuitive judgments (System 1) rather than slower, analytical reasoning (System 2) (Stanovich & West, 2000). The mitigation strategies discussed aim to shift decision-making towards System 2, fostering more deliberate and analytical processes. This framework provides a strong foundation for understanding how biases develop and how structured interventions can address them.

The literature suggests that confirmation bias significantly impacts investigative outcomes, which has led to errors and, in some cases, wrongful convictions. Rossmo and Pollock (2019) and Rassin (2020) highlighted high-profile cases in which confirmation bias led to skewed evidence interpretation and wrongful arrests. Implementing structured decision-making models, such as double-blind evidence reviews and closing gaps in current standardized procedures, can minimize these biases and improve the reliability of investigative processes. In the same vein, confirmation bias has also led to negative impacts on community relations because biased policing practices are shown to target minority communities, which has eroded public trust (Chanin et al., 2018). It is important to address confirmation bias to build effective community policing strategies (Schlosser et al., 2021). According to Glaser (2024), integrating debiasing interventions into regular police training promotes an inclusive and equitable policing culture and enhances public perception and trust.

The implications of this study are that law enforcement leaders must consider implementing these strategies to improve objective decision-making and ensure the fair application of the law. Specifically, targeted interventions like cognitive debiasing techniques, scenario-based training, and reflection exercises can encourage officers to examine their biases critically. Additionally, organizational strategies like double-blind evidence reviews and structured decision-making frameworks are essential to institutionalizing fair practices. These interventions can sustain a culture of accountability and transparency within law enforcement agencies.

A culture that prioritizes accountability, transparency, and critical thinking can mitigate the effects of confirmation bias (Moseley & Thomann, 2021). Integrating bias awareness training into routine law enforcement education can foster long-term cultural change (Glaser, 2024). Engaging with community leaders and stakeholders to identify and address biases in policing practices can enhance transparency and build trust (Chanin et



al., 2018; Schlosser et al., 2021). These organizational changes are critical for reducing the impact of confirmation bias and improving community relations.

This review has several limitations. One limitation is the possibility of selection bias; the studies included were identified through specific databases and may not encompass all relevant research. Additionally, the methodologies used in the reviewed studies presented a challenge to compare and synthesize results because they varied in design, sample sizes, and measurement tools. Furthermore, there is a geographic limitation, as most studies focus on law enforcement practices in Australia, Europe, and the United States, limiting the generalizability of findings to other regions with different policing contexts and practices. Future research should include a broader range of studies from diverse geographic and cultural backgrounds to provide a more comprehensive understanding of confirmation bias in law enforcement from a global perspective. Additionally, future research should focus on developing and testing interventions aimed at mitigating confirmation bias in real-world policing contexts. Exploring the influence of organizational culture on mitigating biases may also provide insights into systemic changes needed to address confirmation bias.

This review endeavored to build an understanding of confirmation bias and aimed to offer mitigation strategies to advance law enforcement practices. This review examined the literature on the impact of confirmation bias in law enforcement and focused on decision-making, outcomes, and mitigation strategies. It answers the research question and presents the current knowledge for each identified theme. The work also identified the areas for future research. The current literature shows that confirmation bias impacts police practices, like investigations and decision-making. However, the methodologies and outcomes of the studies indicate that more research is needed to understand the mechanisms by which confirmation bias influences law enforcement activities. This review provides an impetus for further research on debiasing interventions like training programs, cultural change, and technology use to support unbiased decision-making. Studies included in this work only provided a cursory review of these variables and their impact on policing effectiveness and community trust. Future research should expand on these findings to develop a more comprehensive understanding of confirmation bias mitigation strategies and improve the fairness in the administration of justice.

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