An Investigation into the Preventative Measures for Proactive Police Responses to Mental Health Crisis Calls: A Critical Review

by

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Abstract

Across the globe, there have been more instances in the news where police are responding to calls and the individual is undergoing a mental health crisis. Based on systematic review of literature and critiquing of methodology, the author examined police responses to mental health crisis calls, as well as current preventative measures that have been put in place for proactive responses. The following questions were kept in mind: What programs or practices are being utilized to improve police responses to individuals experiencing mental health crises, how effective are these models in responding to individuals experiencing mental health crises, and how do police officers' own mental health impact their responses? This study suggests that implementing proactive police responses such as co-response teams or offering specialized training in mental health is effective and has an increased benefit to officers and the public. Many officers who were not part of a co-response team or who have not received specialized mental health training were more likely to identify feeling ill-prepared in responding to mental health crisis calls, whereas the officers who did participate had better outcomes in regard to the number of arrests made and an increase in referrals to community services. Lastly, the findings suggest that these preventative measures or proactive police responses contributed to creating a sense of safety to individuals experiencing a mental health crisis by having responders successfully deescalate the situation and connect them to the proper mental health supports. After critiquing the methodology, clear limitations and barriers were identified in the steps needed to be taken to create real systemic change

Keywords: *preventative measures, proactive police response, mental health crisis calls*

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An Investigation into the Preventative Measures for Proactive Police Responses to Mental Health Crisis Calls: A Critical Review

In July of 2013, 18-year-old Sammy Yatim was shot dead while standing in an empty streetcar in Toronto with a knife in his hand. His behavior, as seen in videos, indicated the possibility that he was experiencing a mental health crisis. A similar scene played out in Toronto just 16 years earlier, where Edmond Yu was fatally shot on an empty city bus holding a hammer. After that incident, there were 24 recommendations handed down from a coroner's inquest jury, including lessons in de-escalation techniques, fear management, and a yearly course in use of force. However, after the shooting of Mr. Yatim, the public were left wondering if any of the recommendations were implemented (Andreatta, 2013). These traumatic events put policing systems in the limelight, specifically around evaluating police responses during crisis calls. The question becomes if police were better trained in non-violent intervention, were evaluated for predictors of police aggression, or had access to a team of people who were specially trained in crisis responses, would there be less tragic events when responding to police calls? As stated by Coleman & Cotton (2010), in response to cases of significant negative outcomes to people interacting with police it is most frequently recommended that police officers need to be properly educated and trained in order to interact appropriately, especially in dealing with people with mental illnesses.

Considering the public discourse on defunding the police, conversations about police responding to mental health calls and welfare checks have resurfaced. Sammy Yatim's death shone light on how police responders are not adequately trained or evaluated and sparked other conversations regarding police violence and how they respond to mental health. In June of 2020, a man with Schizophrenia who called for help was shot to death by police in his home in

Ontario, which lead to questions on why police are the ones responsible for responding to these calls instead of mental health professionals (Wilson & Aguilar, 2020). In North America, the number of police calls involving someone with a mental illness falls between 7 and 31%, and interaction between individuals experiencing mental health crises and police officers is continuously increasing (Shapiro et al., 2014). In the United Kingdom (UK), the number is estimated to be between 15 and 50%, and with these rising numbers police feel as though they lack the skills needed to respond appropriately to these cases (Lancaster, 2016 & Puntis et al., 2018). Understanding the impacts that police responses have on individuals is important. There has been accumulating evidence showing that police violence is a public health concern and that exposure to it can be linked to a wide range of mental and physical health outcomes (DeVylder et al., 2020). Understanding the elements that contribute to police violence such as officers' own mental health, personality factors, and police culture could be useful in providing officers with sufficient training and interventions to decrease the risk of violence to the public, and increase effective supports to those in need.

Globally, mental health problems appear to be one of the main causes of disease burden (five different types of mental illness are listed in the top 20 causes) as cited by Scantlebury et al. (2018). Rather than being placed in hospital or treatment settings, people with mental illnesses are three times more likely to be incarcerated with estimates ranging from 14 to 50% of incarcerated individuals suffering from mental health problems (Bailey et al., 2018). Police have evolved into gatekeepers to the mental health system, and due to limited mental health training and lack of adequate options for mental health services, officers are finding this challenging (Canada et al., 2012). This highlights the need for police officers to be trained in trauma informed care, non-violent de-escalation techniques, have an understanding of the services and

programs available in their area, and be provided mental health education so they can respond appropriately. The purpose of this study is to examine what possible improvements need to be made in how officers are trained to respond to mental health crises, and the benefits of co-responding models.

Research Problem

Policing is a public service that requires public oversight and examination, especially to examine and evaluate the level of training officers receive surrounding mental health distress calls. Police should be evaluated on all responses to calls, however more so around ones involving individuals from minority groups as well as persons in the vulnerable sector. This is because police officers are in a position of power and studies show that vulnerable populations experience more discriminatory behavior from police officers (Novich & Hunt, 2017), and there is a misuse of force in the handling of mental health related encounters by police officers (Wood et al., 2017). In a study by Yang et al. (2018) it was indicated that 77.5% of the officers surveyed reported times they felt unsafe when dealing with mental health related calls, and the same study showed the use of force being higher for mental health related calls in comparison to non-mental health related calls. Correlation does not necessarily mean causation, but it is an important piece of data to think about.

In relation to an analysis done in 2006, one quarter of people suffering from a mental illness had a history of police arrest (Yang et al., 2018) and in general studies have found that officers target individuals based on demographic context, including mental illness (Novich & Hunt, 2017). Shockingly, according to a study by Appelbaum (2015), in the United States an individual with a mental illness is shot and killed by police every 36 hours. This shows that risks are clearly involved when mental illness and policing collide, and studies have shown that

alternative mental health training programs and utilizing co-responding models has proven to reduce some of these risks (Bailey et al., 2021; Canada et al., 2012; Horspool et al., 2016; & van den Brink et al., 2012). This systematic review focused on the effectiveness of these models and exploring the impacts they have on the individuals experiencing the distress, the police officers, and society as a whole.

Recent media accounts have highlighted issues of the abuse of police force and the lack of culturally informed and trauma informed practices targeted at minorities (Balko, 2020 & Ober, 2020). Black males are disproportionately victims of police killings in the United States as well. According to the study by Smith Lee and Robinson (2019), from the age of 10 Black males were three times more likely to die as a result of police violence than White males. The study examined personal narratives of trauma and bereavement resulting from police violence and showed that being exposed to police violence (personally or vicariously) contributed to fear, hypervigilance, grief, and psychological harm. It also suggested that being exposed to police violence could be a major factor in developing PTSD (Smith Lee & Robinson, 2019). Trauma informed practices or models focus on realizing the impact of trauma on individuals, and understands different paths for recovery in order to respond in a way to resist re-traumatization which ensures safety to the greater community (Lathan et al., 2019). Society is now advocating for safer communities, for systems to be culturally and trauma informed, as well as focusing on reducing stigma on mental health (Novich & Hunt, 2017). Police officers often “lack sufficient mental health training and knowledge of mental illness to manage the risks associated” (Clayfield et al., 2011, p.742) in responding to mental health related incidents and current police culture shows a resistance to perceiving mental health work as a valid part of the police role (Lane, 2019) despite growing evidence that police work is very much impacted by individuals

experiencing mental health distress. By assessing the effectiveness of specialized mental health training programs and co-responding models when dealing with individuals experiencing mental health distress, a difference could potentially be made for the communities who adopt these practices.

Research Question

The main objective of the study was to investigate what improvements need to be made related to police training regarding responses to calls for arrest where the individual may have mental health issues. This study sought to answer the following research questions:

1) What programs or practices are being utilized to improve police responses to individuals experiencing mental health crises?
2) How effective are these models in responding to individuals experiencing mental health crises?
3) How do police officers' own mental health impact their responses?

Significance of the Study

The results of this study are significant to examine because they have the potential to influence how police are recruited, the responsibility police officers have in understanding mental illness, policies and procedures in policing and mental health, as well as clinical and therapeutic implications. It can be assumed that it is important to assess police responses to all individuals, but for the purpose of this study the author will focus on responses to individuals who are already experiencing mental health distress.

This research will help governing bodies and policy makers address issues that are relevant to police responses to mental health and may provide support for advocates of co-

responding programs or training programs to help improve the experience for all involved. It can also contribute to understanding the importance of police officers' own mental health and the impacts it has on the officers and the public. By identifying these vulnerabilities, interventions can be added to training programs to identify risk factors for police violence as well as possible treatment strategies for officers. Therapists, psychologists, policy makers, governing bodies, police departments, and citizens would benefit from this research in order to create a deeper understanding surrounding the roles that police officers are taking on in the field of mental health and how to best support them.

Purpose of the Study

The purpose for exploring the responses between police officers and individuals who are experiencing a mental health crisis is because in North America there has been an increase in police involvement in these communities (Shapiro et al., 2014). Police are often the first responders, and in the absence of specialized training in mental illness some of these crises could end in incarceration of the individuals rather than referrals to more appropriate services (Teller et al., 2006). Lack of training and mental health evaluation for police can potentially lead to lack of trust of the society on this system as well as criminal liability for those who are involved (Horspool et al., 2016). With the understanding that there are other possible models for responding to individuals experiencing mental health crises such as co-response teams or mental health trained officers, new approaches could be utilized that could potentially reduce the strain on the criminal justice system and better support these individuals.

Scope and Delimitations

This study outlines the main themes in the research literature regarding mental illness and policing by comparing and contrasting additional police response programs. The researcher has chosen to explore this topic of police responses to mental health as a response to education for social justice. The studies collected cover a broad range of time as there was a limited amount pertaining specifically to police responses to mental health. There are many other factors that need to be researched at a greater depth that contribute to how police officers respond to individuals, such as evaluating psychological personality factors of people entering the police force, impacts of systemic racism, and the lack of access to mental health services are all dynamics that need to be considered however were only briefly mentioned in this study.

All articles were scholarly, peer-reviewed, and collected from the City University of Seattle library database and Google Scholar. It should also be considered that the search terms were broad in order to collect a greater number of articles, and it is possible the terms used were not able to fully capture the available research at this time. Mental health issues and illness vary across the board and can be extremely complex – thus generalizing them under one umbrella was the most efficient way to complete this specific study.

Researcher's Position

The researcher has worked with individuals who experience mental health crises for over a decade, and from observations have recognized flaws in the systems. For example, when an individual is having a mental health crisis often times police need to be called due to lack of other mental health emergency supports. I am also aware of individuals being arrested for being noncompliant despite them experiencing mental health distress, or of police responding to mental

health calls in ways that cause further harm to the individual, such as using violence. By addressing some of these flaws, the researcher hopes to inspire further research regarding systemic issues and instigating real-life change. With knowledge gained from this study, further research can be done to address the effectiveness and impacts of further training and co-responding police models on individuals experiencing not only mental health crises, but other social issues as well.

Review of Related Theories and Studies

In order to investigate preventative measures for proactive police responses to mental health crisis calls, I completed a comprehensive literature review using multiple sources of information that include theories and studies to critically analyze the effectiveness of the use of co-responder models and specialized trainings and compared them to traditional police responses to mental health crises.

Key Terms

The following are definitions and how they are used in this study.

Preventative Measures

In the context of this literature review, preventative measures are precautionary steps (Merriam-Webster, 2022) taken in order to respond to crisis calls appropriately. In terms of police response to mental health crisis, this includes the use of specialized mental health training in addition to co-response teams, as well as practices such as stop-and frisk or algorithmic policing (Benerjee, 2020).

Proactive Police Response

According to new research, having a proactive police response is the practice of showing police presence in order to deter criminal activity or integrating community involvement between civilians and police. This is done to maintain order, prevent crime, and reduce the fear of crime ("Proactive Policing", 2022). For the purpose of this study, proactive police responses refers to responding to crisis calls in a practical sense regarding the type of call and responding in an appropriate manner.

Mental Health Crisis Calls

Mental health crisis calls refer to responding to a distress call related to individuals with mental illness, or are undergoing a mental health challenge, which can be defined as a situation where an individual's behavior has the potential to put themselves or others at risk of being hurt or prevents them from being able to take care of themselves and function within the community (Brister, 2018). According to Bailey et al. (2018) it can otherwise be labelled as persons with mental illness (PMI).

Theoretical Conceptualization

This section focuses on the different types of co-responding models and specialized mental health trainings that have been studied and reviewed as well as the significance of these models and their effectiveness. It is important to study this given the impacts the policing systems has on diverse populations and assessing areas they need to be held accountable in, and reviewing models that may be more effective in responding to mental health crisis calls. In order to research the impacts police departments are having on individuals undergoing mental health

distress, it was important to assess each of the concepts separately and examine the most current research.

Co-responder Models

Co-responder models, sometimes used interchangeably with police street triage models, are models or programs that involve specialty trained professionals in the field of mental health working alongside police officers in order to respond to mental health crises and diverting persons with mental illness from the criminal justice system (Bailey et al., 2018). They are aimed to reduce distress caused to the persons during these incidents as well as reduce the likelihood of the person being detained in police custody (Puntis et al., 2018). The numbers of interactions between persons with mental illness (PMI) and police officers are increasingly high with between 7%-31% of police calls involving a person with a mental illness or in mental distress in North America (Shapiro et al., 2014). The UK reports that police often feel they lack the appropriate skills to support those experiences a mental health crisis, and yet the amount of police encountered incidents ranged from 2%-50% (Puntis et al., 2018).

According to Puntis et al. (2018) there are "two main overarching models of triage" when addressing PMI (p.1). One of the most prevalent of them being crisis intervention teams of police officers specifically trained how to safely and respectfully interact with people with PMI and provided psychoeducation on mental illness. They often have received extra hours of training about mental illness or de-escalation strategies in comparison to traditional police training. The second co-response model approach would be one where police had assistance from mental health professionals in person or remotely during incidents as part of a multidisciplinary team approach (Puntis et al., 2018). These types of teams often include social workers or mental health therapists to assist during calls and refer individuals to the proper support systems.

It is important to note that the co-response models included in the studies throughout the paper have variations such as time and day of operations, whether the unit is a first or second response option, whether the police officer and mental health worker were co-located, a mobile unit was dispatched, and the mode of transportation to the incident (Puntis et al., 2018). This could influence service delivery and responses by individuals accessing the services.

Significance of Co-responder Models

Because co-responding models are being increasingly used to respond to individuals experiencing mental health crises (Shapiro et al., 2014), it is important to address why these models are important to implement or experiment with. According to Bailey et al. (2018) PMI have been managed "precipitously" by the criminal justice system since the 70's. This does not consider other contributing factors such as a decrease in mental health services, fewer hospital beds, changes made in law regarding mental health (Shapiro et al., 2014), police violence (DeVylder et al., 2020), and systemic racism (Balko, 2020). Shapiro et al. (2014) also states that increased interactions with PMI crisis calls can be costly and absorb much of the policing resources while offenders with mental illnesses are overrepresented in our criminal justice systems as well. Researching different responses such as co-responding models could contribute to re-establishing contact to appropriate mental health resources (van den Brink et al., 2012) and educating officers on how to better manage individuals experiencing mental crisis (Borum et al., 1998).

It is difficult to determine whether a co-response team or mental health specialty trained officers would be most effective in response to mental health crisis calls. This is because there needs to be expanded research on both models as well as standards developed to increase effectiveness. According to Fladen (2021), both models are important and hold value. He states

that because of the likelihood of police officers coming into contact with individuals in mental health crisis, it is necessary for officers and dispatchers to have targeted training such as Crisis Intervention Training. Fladen (2021) also states that utilizing co-response teams would be effective in providing appropriate triage and allowing police officers the resources to respond to other non-mental health related calls.

Other Theories Utilized

A combination of two theories, such as systems theory and intersectional theory, can also be helpful to explain the police response to mental health crisis calls. Through analysing systems with intersectional paradigms, the researcher examined the frameworks that are currently in place and the impacts they have on individuals experiencing mental health distress utilizing a foundational approach to evaluate the facilitators and barriers that are experienced when police are responding to them. Together these theories work well to explain the policing systems and relational strategies that can be used to improve outcomes for individuals experiencing mental health crises.

Systems Theory

Systems theory arose in the 1950's because of various improvements in the areas of psychology, communication theory, and psychiatry focusing on the role of feedback mechanisms influencing individuals and patterns of behaviour (Walker, 2019). The theory expands the context of an experience of an individual to the broader systems that are in place such as medical settings, policing and incarceration settings, as well as the broader community (Mikesell et al., 1995). Traditional policing is a method of policing that includes a hierarchal system and highly formalized social structures. This type of policing is consistent with the role police play within the system of the community, as well as the barriers they face when interacting with an

individual in mental health distress and navigating the other social systems such as hospitals, treatment centers, and other support services (Ferrandino, 2014). Utilizing this theory is helpful within this review in order to gain an understanding of the impacts systems play on police officers as well as the individuals experiencing mental health crisis.

Intersectional Theory

Intersectional theory was penned by Kimberle Crenshaw (1989) in order to consider the different ways that Black women are positioned regarding the law, identifying the intersection of race, gender, and class (Olofsson et al., 2014). Intersectionality is a tool that identifies these categories of differences and focuses on the outcomes of these interactions in terms of power (Davis, 2008). Understanding the system of policing and the power that is at play, it is crucial to comprehend intersectionality and what it means for individuals who are coming into contact with police officers. DeVylder et al. (2020) indicates that police responses and culture contributes to mental distress and emphasizes the links between this association and minority communities specifically. It can be inferred that factors that impact an individual who is mentally well, white, male, and middle-class are going to be far different than factors that impact an individual who may be experiencing a mental health crisis who is Indigenous, female, and has a lower socioeconomic status. When in a position of power, it is important to acknowledge these intersections and respond in an appropriate manner.

Related Studies

Effective and Non-Effective Preventative Measures

Some traditional preventative policing programs have appeared to justify abusive practices (Banerjee, 2020). For instance, the policing practice stop-and-frisk in New York City was

reported to unjustly target minorities and low-income areas, and was found that although young Black and Latino men account for 4.7% of the population, they were included in more than 40% of the stops between 2003 and 2009 (Aaro, 2020). Algorithmic policing is another traditional policing method that utilizes analytics and statistics in order to forecast crime. However, because the data is based on reported crime, critics argue that the program could lead to more aggressive policing in communities of color (Moravec, 2019). These types of preventative policing measures are discriminatory in nature, and increase the risk of police violence (Balko, 2020). This is important to note because intersectionality provides a critical framework for understanding these systems of oppression and it is crucial to understand how different positions in hierarchies such as racial, gender, ability, etc. interact with structures of power (Poteat, 2021).

Literature shows that there may be a link between the risk of experiencing police mistreatment or abuse and individuals who have mental health problems due to officers often being inadequately trained for dealing with mental health (Oh et al., 2017). Many studies indicated that after participating in a training program or taking part in a co-response team, the majority of officers felt that their newfound knowledge had a positive impact on how they managed interactions with people under mental distress as well as how they viewed mental health in general (Bailey et al., 2018; Canada et al., 2012; Horspool et al., 2016; Morgan & Miles-Johnson, 2022; & Scantlebury et al., 2017). Some studies reported improved communication skills, enhanced de-escalation skills, increasing empathy towards individuals with mental illness, as well as self reflection and a change in views on their own mental health (Canada et al., 2012; Horspool et al., 2016; Morgan & Miles-Johnson, 2022; & Scantlebury et al., 2018).

It was found that "police mistreatment or abuse was more prevalent among respondents with psychiatric disorders and was associated with greater odds of having 12-month mood disorders, anxiety disorders, and posttraumatic stress disorder" even after substance use disorders and alcohol were controlled in the study, which frequently draw police attention and are comorbidities with mental health issues (Oh et al., 2017, p. 1589). If police officers and co-response teams are utilizing preventative measures and using a proactive police response, it could be surmised that these issues could be minimized.

Proactive Police Response

According to a study completed by Ankony (1999), proactive law enforcement would require community integration in order to have an open and dynamic approach to community problem-solve and prevent crime. It highlighted the importance of police departments and communities working together in order to implement community policing programs effectively from the start, especially by undertaking organizational changes that are necessary (Ankony, 1999). In the study, Ankony (1999) quotes Taylor et al. (1998):

> ...How many departments have actually changed the entrance requirements for new officers to reflect changes in the police role? How many have changed recruit training from a military oriented academy to curriculum more in tune with the new role demanded by community policing? How many departments have flattened their organizational pyramid and placed more decision-making in the hands of officers? How many chiefs have turned the organization 'upside-down' and have committed to participatory dialogue with officers as a major part of their management style? How many departments have actually changed their organizational culture? How many departments have structurally changed on a city-wide basis? Unfortunately, we submit to you only a very select few! (p.3).

This statement directly addresses proactive measures that can be utilized to alleviate stressors on police and individuals they are responding to alike. Proactive policing needs to be more than just community policing however. Community policing refers to the partnership and collaboration between the police and the surrounding community. From a psychological lens, being proactive could mean anticipating a problem and instead of reacting to it, seeking solutions and weighing alternatives depending on the situation (Saez, n.d.). When interacting with any individual, but especially with individuals under mental distress, there are many proactive factors that could contribute to better results. Utilizing a softer approach to not escalate a situation, such as using respectful language, could drastically influence how a situation unfolds.

According to Ober, police violence "puts Black, Latino, Indigenous, and sexual minority communities at higher risk of distinct mental health problems, in addition to greater risk of death at the hands of police" (Ober, 2020, para. 2). If police feel ill-equipped or unprepared when dealing with individuals who are experiencing a mental health crisis, the individuals could be at higher risk for not being connected to the right supports, being arrested, or being victims of police brutality (Westervelt & Baker, 2020). Westervelt (2020) states that since 2015, of all the people killed by police officers in America, close to a quarter of them had a known mental illness. He also stated in the same article that crisis intervention teams are currently failing in our society as the programs need to be integrated into widespread community and issues regarding the mental health care system need to be addressed so these calls can be routed away from police and individuals can get the support that they need. There are known benefits to all the approaches discussed, so it can be inferred that utilizing them all would be a significant response (Canada et al., 2012 & Godfredson et al., 2011).

Implementing co-response teams or providing specialty training for officers to be better equipped in dealing with individuals with mental health issues is a response that police departments have begun to embrace throughout the world (Lancaster, 2016; Scantlebury et al., 2017). There is an increasing need to more fully understand diversity factors that impact individuals and society as a whole (Scantlebury et al., 2017) as police officers are spending a significant amount of police time in dealing with individuals with mental illness (Godfredson et al., 2011). Utilizing intersectional theory (Crenshaw, 1989) this current review addresses the impacts of implementation of specialized training to all police officers and explores the barriers and benefits when utilizing co-response teams as more proactive responses to mental health calls.

Factors Influencing Police Responses

Police Mental Health

Understanding the importance of the mental health of police officers is crucial to understanding how they view mental health as a concept, as well as ensuring their own mental health is not interfering with how they are interacting with civilians. The National Alliance on Mental Illness (2022) in the United States reports some concerning facts regarding law enforcement and mental health. They claim that more police die by suicide than in the line of duty, with nearly 1 in 4 police officers having thoughts of suicide at some point throughout their lifetime.

As indicated in a paper by Hakik and Langlois (2020) police officers are exposed to traumatic events and situations on a regular basis, and this increases their chances of developing post traumatic stress disorder (PTSD) or other mental illnesses such as anxiety, somatization, depression, burnout, suicidal ideation, and self harm (Jetelina et al., 2020). Haikik and Langlois (2020) go as far to say that PTSD is “exacerbated by the police culture” due to the unlikeliness of

police officers seeking treatment as well as the negative stigma mental health carries within police culture, which can directly impact officers being further traumatized (p.118). In fact, a report done by the *Standing Committee on Public Safety and National Security* in Canada indicated that "trauma is the rule rather than the exception" (Oliphant, 2016, p.3). That is a bold statement that further highlights the importance of reducing the stigma and supporting police officers' mental health for their own wellbeing, as well as the wellbeing of those they are working with.

Literature also indicates that there are consequences to police officers not acknowledging their own mental health, such as their ability to conduct their job (Haikik & Langlois, 2020). In a study by Jetelina et al. (2020), officers surveyed were shown to be unable to recognize when they were experiencing a mental illness and did not seek services, one main reason due to feeling as though they would then not be fit for duty. According to Talavera-Velasco et al. (2018), the prevalence of burnout was high in Swedish police officers leading to depersonalization as well as emotional exhaustion. Burnout makes it difficult for individuals to maintain relationships and perform their work duties effectively (Talavera-Velasco et al., 2018). In another study by DeVylder et al. (2019), it was found that officers who have higher levels of PTSD self-reported engaging in abusive police practices. Understanding whether or not a police officer's mental illness impacts their ability to do their job effectively would be beneficial to know, in order to encourage proper care to the officer as well as the individuals they are serving.

Psychological Factors of Police Officers

There are patterns of risk factors for police officers that are associated with adverse mental health outcomes. Consistently, neuroticism, introversion, passive coping or avoidance, and low levels of social support have been found to be risk factors for all adverse mental health

outcomes in officers (Sherwood et al., 2019). Studies also show that personality types can be valid predictors of police performance, however there has been a limited number of studies focusing on how these personality traits are associated with the perception of forensic disciplines (Sarki & Saat, 2020). According to Falkenbach et al. (2018), traits of psychopathy may be more prevalent in police officers compared to the general population. This includes traits such as fearless dominance or cold-heartedness which could potentially make an individual more likely to not follow the rules or use excessive force. Screening for mental health when recruiting police officers could prove to be beneficial in identifying mental illnesses and providing supports and guidance as needed, as well as prevent further harm in responding to mental health related calls.

System Related Factors

The literature clearly shows that there is a stigma regarding mental health in policing systems as a whole (Bailey et al., 2018; Bikos, 2021). In one study it was identified that structural stigma in policing contributed to higher workloads and officer burnout while also influencing officers to believe that mental illness was related to one's inability to cope (Bikos, 2021). This impacted policing careers by isolating officers and contributing to distrust in their organizations and willingness to report symptoms to their supervisors or mental health professionals (Bikos, 2021).

In an article by Mahbubani and McLaughlin (2020), many connections are made to the impacts that stigmatizing mental health has on police officers as well as the communities they are supporting. It has been referenced that in a survey completed in Los Angeles in 2018, 90% of officers believed that seeking therapy was stigmatized, and the study went on to explain how this unaddressed psychological toll could potentially be felt by the surrounding communities (Mahbubani & McLaughlin, 2020). If the policing system took measures to ensure that

appropriate individuals were being hired, programs and policies were in place to support mental health, proper supervision was provided to ensure officers were responding appropriately, perhaps a tone would be set for expectations in such a role of power.

Not only does the policing system need to be re-evaluated and reformed, but our mental health systems do too. When a police officer or a co-response team arrives to a scene and finds an individual in a mental health crisis, they need to know there is a safe place to take the individual to receive the proper support. According to Wainberg et al. (2017), there is a widening mental health treatment gap worldwide with more than 70% of individuals who require access to mental health services lacking access to proper care. In one systematic review covering 329, 461 different cases it was found that about one in ten individuals with mental health disorders have had police involved in their pathway to receiving mental health care, and officers report frustration with inadequacies in health and social service systems (Livingston, 2016).

After reviewing these studies, I believe that in order to address the barriers the policing system is facing while attempting to reform the programs that are implemented, the entire system would need to be restructured. Focusing on personalities and mental health of police officers being hired, establishing policies to ensure officers have access to mental health treatment and accountability to maintain mental health with mandatory supervision and health checks, implementing protocols to ensure officers are properly trained in understanding mental health along with other non-violent intervention trainings, utilizing co-response teams to triage mental health crisis calls and build relationship within the community, and reprimanding officers for responding violently when violence is not necessary has the potential to change the policing game entirely, allowing for officers to do their jobs more effectively while causing the least amount of harm to the public. There have been issues with our policing system for many years,

and studies have been addressing many of these major causes for concern (Bailey et al., 2018; Bikos, 2021; & Hakik & Langlois, 2020). It is time to rethink and reshape our responses to mental health, and implementing a simple training program or hiring a co-response team is simply not enough. That being said, it is a start and more research needs to be done in order to conclude what exactly would be most effective in training and utilizing police officers when responding to mental health.

Methodology

A systematic review as a method of study allowed me to analyze ten research articles and synthesize them into a general consensus regarding the findings. Throughout this section, I will critique the methodology used in the articles and highlight the steps taken to conduct my study.

Selection of Articles

Below is a table of the articles that were selected and the main themes that they each represent.

Table 1

Studies: Police Responses to Mental Health and the Effects of Specialized Training and Co-response Teams

Authors	Year	Title	Main theme/research question
Bailey, Lowder, Rising, & Bradley	2021	Evaluation of a Police-Mental Health Co-response Teams Relative to Traditional Police Response in Indianapolis	What are the effects of co-response teams relative to treatment as usual?
Bailey, Staci, Ray, Grommon, Lowder, & Sightes	2018	Barriers and Facilitators to Implementing an Urban Co-responding Police-Mental Health Team	What are the professional and cultural barriers and facilitators to program implementation and identifying guidelines for program success
Canada, Angell, & Watson	2012	Intervening at the Entry Point: Differences in How CIT Trained and Non-CIT Trained Officers Describe Responding to Mental Health-Related Calls	What are the impacts of crisis intervention teams in comparison to non-CIT trained officers?
Godfredson, Thomas, Ogloff, & Luebbers	2011	Police Perceptions of Their Encounters with Individuals Experiencing Mental Illness: A Victorian Survey	What is the frequency of contact between police and people experiencing mental illness, how do officers identify these individuals, and what challenges do they face when performing their duties?
Horspool, Drabble, & OCathain	2016	Implementing Street Triage: A Qualitative Study of Collaboration Between Police and Mental Health Services	What are the impacts of a collaborative service between mental health workers and police?
Morgan & Miles-Johnson	2022	Responding to Persons with Mental Illness (PWMI): Police Recruit Perceptions of Mental Health Response Training and Engagement	How do newly mental health response trained police recruits perceive their knowledge on mental illness and responses?
Scantlebury, Fairhurst, Booth, McDaid, Moran, Parker… & Hewit	2017	Effectiveness of a Training Program for Police Officers Who Come into Contact with People with Mental Health Problems: A Pragmatic Randomised Controlled Trial	What is the effectiveness of a mental health training package for police officers relative to routine training?
Wood, Watson, & Fulambarker	2017	The "Gray Zone" of Police Work During Mental Health Encounters: Findings from an Observational Study in Chicago	How do officers resolve mental health related encounters in Chicago, Illinois and what factors help them in their decision making?
van den Brink, Broer, Tholen, Winthorst, Visser, & Wiersma	2012	Role of the Police in Linking Individuals Experiencing Mental Health Crises with Mental Health Services	To what extent are individuals experiencing a mental health crisis disconnected from appropriate services, and can police response influence the outcomes?
Yang, Kanewske, & Thompson	2018	Exploring Police Response to Mental Health Calls in a Nonurban Area: A Case Study of Roanoke Country, Virginia	What are the challenges of responding to mental health calls for police officers in Roanoke Country, Virginia?

Data-Analysis Procedures

I reviewed the literature related to the topic of study and presented supporting and refuting arguments before synthesizing information gathered. Secondly, I critically analyzed the methodology of 10 different studies that have been mentioned throughout this review. I conducted a search on the City University database and Google Scholar using the key words 'police responses', 'mental health', 'crisis intervention' and 'co-responding' for this systematic review. Qualitative, quantitative, and mixed methods studies involving co-responding police-mental health programs were included, as well as studies involving collaboration models and specific mental health training programs. Studies that address the lack of training or the current experiences of police work responding to mental health calls and mental health of officers are also included. Literature on interventions that do not include both police work and mental health were excluded. Articles from beyond five years were not excluded as there is limited research on the topic and the information provided in the more dated studies provide a solid groundwork for the theories. All literature was scholarly and peer reviewed. The literature was critically analyzed to find similarities and differences to answer the research question.

The researcher then gathered the materials and competed a literature review. This is done in order to identify and organize sources and apply to the research questions. The researcher has decided to decode the themes based on the research questions, and categorizing which models are currently being used and studied, the significance of these models, and the effectiveness of them. I assessed paradigms of the researchers of the studies being reviewed, as well as considered the participants in the studies, how the data was collected, how the data was analyzed, and then interpreted the data. The researcher critically analyzed the information gathered and

reported any findings. Then the researcher discussed ethical considerations, limitations to the study, and future considerations.

Critical Analysis of the Methodology

In order to begin my critique and analysis of the studies I had selected, I first selected ten articles based on certain inclusion and exclusion criteria. Once I had the ten studies selected, I organized them into different groups based on the main themes of the articles. These themes were then categorized into my main research questions: What programs or practices are being utilized to improve police responses to individuals experiencing mental health crises? How effective are these models in responding to individuals experiencing mental health crises? Lastly, how do police officers' own mental health and personality characteristics impact their responses? As I read through the articles, I was able to highlight key themes or data that informed potential answers to my questions. I was then able to compare the similarities and differences among my selected studies in order to gather more information, recognize gaps in the literature, and compare and contrast outcomes.

Quantitative and Mixed Methods Studies

Research Paradigms

Research paradigms identify the philosophical worldviews of the researchers (Creswell, 2014). These worldviews are evident in the research that is being done, and influence how the research is carried out. Quantitative research is objective, and uses variables to measure outcomes through analyzing numbered data to see how it relates to a hypothesis (Williams, 2007). Some studies such as Scantlebury et al.'s (2017) and van de Brink et al.'s (2012) outlined a positivist approach to experimental research in order to gather information and determine if

specific treatments influence outcomes. A positivist approach reduces behavior into elements in order to measure them and form a hypothesis, and are under the assumption that everything can be measured in order to determine causes and effects in the world (Williams, 2007). Godfredson et al. (2011), Wood et al. (2017), and Yang et al.'s (2018) study designs used pragmatic paradigms, with mixed methods approaches such as theme analysis, interpretivist approaches, and grounded theory. Pragmatism is a worldview that looks at actions, situations, and consequences. Researchers coming from this lens emphasizes a problem and looks to use all approaches to understand the problem using both qualitative and quantitative methods (Williams, 2007). Researchers are free to choose methods and techniques that work best for them, and look to explain the purpose for why they are mixing their methods of research. I believe this eclectic approach is useful in considering all areas and aspects of research and looking for solutions or more information on a topic.

Roles of the Researchers

In quantitative research, researchers are meant to remain objective by using predetermined instruments in order to collect and analyze data, which means they have minimal roles when conducting research (Creswell, 2014). They are only required to randomly select samples, administer tests or scales, and use statistical analysis to process their data (Yilmaz, 2013). In the five quantitative or mixed methods articles that were selected, most of the researchers did not clearly identify their roles in how the research was conducted. That said, four of them mentioned the governing bodies that approved each study. Godfredson et al. (2011) stated that the researchers involved were attending Monash University in Australia, and were connected to the Centre for Forensic Behavioural Science. It was noted that their questionnaire was developed by the researchers in consultation with policy makers from Victoria Police and

senior officers, and that the study did receive full ethical scrutiny and approval from the Monash Standing Committee on Ethics in Research Involving Humans as well as the Victoria Police Human Research Ethics Committee. Scantlebury et al.'s (2017) study identified approval by the North Yorkshire Police Training Commissioning Group and the University of York Health Sciences Research Governance Committee, and Wood et al.'s (2016) study mentioned approval by Chicago Police Department and the institutional review board of University of Illinois at Chicago. The study done by van den Brink (2012) identified approval by the Ministry of Justice, as well as reporting the Psychiatric Case Register to the Data Protection Authority.

Only two studies specifically identified each researcher's role in the study. Scantlebury et al.'s (2017) study listed each researcher's name, their role in the study, and their affiliation. All of the researchers involved assisted in conceptualization, writing, and review and editing. Others were involved with investigation, methodology, funding acquisition, project administration, resources, data curation, formal analysis, supervision, and visualization. Some were affiliated with the Department of Health Sciences and the Department of Social Policy and Social Work through the University of York, as well as the North Yorkshire Police. The second study by van den Brink et al. (2012) identified that five of the authors were involved in the design of the study, while data collection was performed by four of the aforementioned authors plus another one. Only two authors analysed the data, while all six of them were involved in interpretation and revision of the manuscript. Because Wood et al.'s (2016) study is mixed methods, the researchers involved also conducted open-ended observations while on ride-alongs and were responsible for conducting field notes.

The last study in this section by Yang et al. (2018) did not identify any roles of the researcher, or state any approval by an ethics board. This is important to note as it was not made

clear if the study meets any ethical guidelines. An affiliation was noted between the first author and the Department of Criminology, Law and Society at George Mason University in Virginia, however that is not enough to infer whether or not this particular study meets any standards or requirements.

Participants

Sampling. In the studies examined, it was not always specified if the researcher randomly sampled participants from their selected population or not. For work by Scantlebury et al. (2017), two police stations were selected within each of the six Safer Neighbourhood Command (SNCs) areas and randomized for eligible frontline officers to receive either the routine training as the control group or the specialized mental health training as the intervention. The 12 stations were then randomized and the training department informed each station allocated to the intervention group about the training. Because training for police officers is mandatory, participation in this specialized mental health training was made to be compulsory for the officers that were selected. Officers were eligible as long as they were ranked as Police Constable, Sergeant, Inspector, as well as Police Community Support Officers. The randomization process was done by a statistician at the York Trials Unit using computer programs to ensure the groups were balanced in terms of number of officers and rank or specialized roles. 360 officers total were put forward for training, and of these 249 (69.1%) received the specialized mental health training. The study done by Wood et al. (2017) focused solely on the Chicago's Police Department's CIT program. According to the results of the 53 officers who were observed, two-thirds of them were not CIT trained, and 70% of the officers were male and 83% of them were Caucasian. The years of experience ranged from less than 1 week to 27 years. Yang et al. (2018) designed a survey for their study in order to distribute to the

Roanoke County Police Department, which has 140 sworn officers when at full capacity. The survey was provided to all staff in the RCPD in 2016, 73 of which participated, and data was also collected from police records, analyzing 39,549 calls made to the department in 2014 (Yang et al., 2018).

Unlike Scantlebury et al. (2017), Wood et al. 2016), and Yang et al. (2018)'s studies, it was specified that participation was voluntary for the study by Godfredson et al. (2011). The participants were recruited from nine training sites in the State of Victoria in Australia, and all police officers are required to attend Operational Safety and Tactics Training twice a year. Of the 3,811 surveys handed out, 3,534 were returned completed, which was a response rate of 92.7%. 76.8% of them were male, and the average age was 40.4 years. On average, the years of service with the police department was 15.4 years (Godfredson et al., 2011).

Lastly, in the study by van de Brink et al. (2012) records of a police district in the Netherlands (Groningen) were searched in order to identify calls to the police that involved mental health crises in one year. From a database of 198,000 inhabitants, the mental health crisis calls involved a total of 336 individuals, and they were all involved in a regional Psychiatric Case Register which records contact between clients and mental health services. Reports were excluded if the individuals were arrested for offences, if they were classified as drug or alcohol abuse, and if the calls were not responded to by police or the police were unable to find the person concerned. This was done in order to focus on clear situations of incidents involving individuals with acute mental health issues and the option for police to link the person to mental health services (van de Brink et al., 2012).

Recruitment. Recruitment seemed to vary amongst the different studies. For example, the researchers in Godfredson et al.'s (2011) study provided the officers with questionnaire packs

during the training, and it was the officers' choice to participate or not. Much like Yang et al.'s (2018) study, where the survey was completed by 73 staff members, but that data was only collected from 71 of the surveys as 2 of them were removed to protect the identity of two officers. Additionally, it was noted in the study that RCPD officers participate in crisis intervention team training, so among the officers included in the study, 83.1% received some of the training and 76.1% received the full training.

For the study by Scantlebury et al. (2017), two police stations were selected from each of the six SNCs due to their high numbers of frontline officers and because they were larger stations. Recruitment of the 12 stations (with a median number of 43 officers per station) was done by the NYP training department assisted by the research team using the NYP's IT system to identify eligible police station and highlighting the stations with the highest number of frontline officers. While it wasn't specified how officers were recruited to participate in Wood et al.'s (2017) study, it was noted that there were 31 ride-alongs in 11 police districts, with observations occurring between three different watches in order to include officers in the daytime, evening, and midnight hours. The officers worked alone or in pairs and the researchers observed both reactive and proactive encounters.

All of these studies focused on members of co-responding teams, police departments, mental health professionals, and other systems in place. They did not focus on the public who have had experiences working with these systems as individuals with mental health issues, which I feel would provide a deeper insight into which programs are the most helpful for these individuals accessing the services.

Data Collection

While most of the five quantitative and mixed methods studies focused on accessing police records, a couple provided surveys and questionnaires in order to measure perceptions and outcomes. The questionnaire that was given out in Godfredson et al. (2011)'s study was developed by the researchers through consultation with policy makers from Victoria Police as well as senior police personnel. The sections included were: (1) the sources of information used to understand and identify whether someone had a mental illness; (2) the relative frequency of different outcomes resulting from their interactions with people experiencing mental illness; (3) up to five signs, symptoms, or behaviors that they believed were useful in determining whether someone had a mental illness; and (4) the biggest challenges they faced when attempting to resolve situations involving people experiencing mental illness. For the last section: (5) their attitudes toward mental illness, they used the Mental Health Attitude Survey for Police, which was amended in order to ensure cultural sensitivity and was checked for validity by the research team. Social desirability was also included using the Marlowe Crowne Social Desirability Scale.

In total, 53 officers in 11 police districts were observed over approximately 120 hours in Wood et al.'s (2017) study. Over a period of 18 months, 31 ride-alongs were conducted in 11 police districts in Chicago, Illinois at different times of the day between July 2013 and December 2014. The researchers were instructed to conduct open-ended observations of both citizen-initiated and officer-initiated encounters. During quieter periods of time, researchers also took opportunities to speak with the officers and query them on general experiences with mental-health related calls. Field notes were taken in order to capture the details of each encounter, recording information such as physical descriptions of the individuals at the scene (including complainants, witnesses, bystanders, and the alleged subject and responding officers), along with

interactions and conversations between the police and the parties at the scene. Observers then could ask the officers follow-up questions about the particular situation and the outcome. This contributes to the reliability and validity of their study by capturing multiple opportunities to gather information and collect data to cross-reference.

The other three studies accessed databases in order to collect the data needed. As stated by Scantlebury et al. (2017), data was collected by using routinely collected police call information in order to assess the number or incidents reported to the NYP control room, as well as the likelihood of incidents having a mental health tag applied or a mental health warning marker. Calls made were automatically recorded on the IT system and then transferred to a system that would later be extracted by an intelligence analyst. Data was collected for up to six months after delivery of their trainings and a random sample of 100 incidents were reviewed by an independent mental health professional in order to assess the viability of using the mental health tag. This was done blind to whether or not the tags were actually applied in order to contribute to validity.

The study done by van de Brink et al. (2012) was completed by accessing police records and searching calls to the police during a period of one year regarding mental health crises. In the records the written accounts from the police officers are what were assessed. This could potentially show bias and impact validity as it assesses only the officers' perceptions of the situations. According to the study, diagnostic information as well as the number of care contacts were retrieved (van de Brink et al., 2012). When entering information into this system, officers are categorizing the incident into a limited number of codes, and included in the study were the codes 'nuisance by a presumably disturbed person' and 'suicide attempt'. Codes such as 'assistance of citizen', 'domestic or neighbours' quarrel', and 'violence' were searched for key

words involving mental health needs as well. This is how the selection of calls for mental health crises were identified. In order to analyze the police response for crises, non-standardised reports of incidents by the officer were categorized as dealt with by the police without contacting care, mental health service were contacted by police, other care services were contacted, or person was dropped off at the crisis drop-off centre for a mental health evaluation (van de Brink et al., 2012). The researchers also examined the regional Psychiatric Case Register for information about the individuals who were involved with the police for mental health crises. This was done by looking at cases with regular care contact in order to distinguish clients in regular care from those who only come in contact with services during a crisis (van de Brink et al., 2012). This data was categorized into three different categories: frequent care contacts, some care contacts, and no care contacts.

According to Yang et al. (2018), for their study data was obtained from police records from the primary law enforcement agency in the county, Roanoke County Police Department (RCPD). This department serves a population of 93,730 people (in 2017) and covers 250 square miles (Yang et al., 2018). Information was collected from police records dating back to the years 2014-2016, and included call types relating to suicide attempt, suicide threat, mental health, mental health with weapon, and Emergency Custody Order/Temporary Detention Order. Due to information being submitted by officers directly, it could be fair to question validity and possible bias from the officers' perceptions. A second database was used to collect data surrounding police use of force. The surveys that were administered were focused on options for officers in responding to mental health calls, the length of time dedicated to these calls and the locations they most often occurred, and the attitudes of the officers towards the individuals experiencing a

mental health crisis. Demographics that were collected include the tenure within the department, departmental rank, and division assignment (Yang et al., 2018).

Data Analysis

Most of the researchers conducting the studies in this category coded and analyzed their findings themselves. From the data collected from the databases, Yang et al. (2018) was able to compare five main categories of non-mental health related calls to mental health related calls in order to gain a better understanding of the types of calls and the amount of time spent on them. Findings from this data was then corroborated by the responses from the officers in the survey (Yang et al., 2018). Similarly, Wood et al. (2017)'s researcher field notes were coded and analyzed themselves. They met regularly through web conferencing to reflect on key insights that were developing in the observations. One of the authors who was not involved in the field work reviewed the field notes and lead the discussions in order to discuss emergent themes. These meetings helped code the data using ATLAS software, which is a qualitative software tool.

Godfredson et al. (2011) scanned the results of their surveys into a database, and any free text responses were recorded verbatim. The research team then used descriptive statistics in order to explore the participants' responses on the questions that were scored with the Likert scales. Data that used responses from the open-ended questions were analyzed and interpreted by identifying themes in the responses. In order to allow for a manageable data set and thematic saturation, 15% of the questionnaires were selected at random to gain an in-depth perspective of how thoughts and experiences of police officers can be explained by the narratives that were given on common signs and behaviors that they ascribed to mental illness. This is a much more thorough way to code and analyze data as there are many measures in place to saturate the data.

According to Scantlebury et al. (2017), the control group received their training that covered basic mental health law, procedures around mental health, as well as how to respond to incidents involving individuals with mental health problems. They received no other training outside of this. The intervention group however received the same basic training, as well as the updated training that focused on enhancing officers' understandings of identifying mental vulnerabilities, recording relevant information, responding using appropriate resources, referring to other services, and reviewing incidents to ensure risks were managed effectively. The training was provided by mental health professionals using lectures, group discussions, filmed scenarios, and short films. Analyses were conducted using two-sided statistical tests at the 5% significance level (Scantlebury et al., 2017). Number of incidents were compared between the control and intervention groups using negative binomial regression at the station level, and the likelihood of an incident having a mental health tag applied was analysed using a mixed logistic regression model at the incident level. The total number of individuals with a mental health warning marker was analyzed the same way, along with identifying the average number of officers in attendance at the incident.

Lastly, post hoc tests were used in order to analyze the data in van de Brink et al.'s (2012) study, which are designed to identify overall significance of the data (Shan & Gerstenberger, 2017). The relationships between types of police response and care contacts were studied in two ways: first, influence of police response on the change in number of contacts from the month before and the month after the crisis were examined by analyzing the variance with post hoc t-tests between individual responses. It was also tested whether influence of police response depends on level of contact the person had with services in the year before the crisis. Secondly, the researchers tested whether police response was related to linking individuals to

relevant services, as well as tested whether linking to these services resulted in lasting care. These were all tested by using Chi-square and post-hoc tests for differences between police responses (van de Brink et al., 2012).

Qualitative Studies

Research Paradigms

Five of the studies reviewed were qualitative in nature. In qualitative research, different approaches are used in order to derive meaning from past experimental research, as well as being descriptive in the experiences of the participants (Creswell, 2014). This method looks at individuals or groups of people and seeks to explore deeper by asking open-ended questions through interviews, surveys, and observations. The researcher then needs to interpret the data, and using theories to generate themes and meaning of the data (Williams, 2007). Bailey et al. (2018 & 2021) and Canada et al. (2012) utilized constructivist approaches by using interviews, case studies, and grounded dimensional analysis. It can be inferred that Horspool et al. (2016) and Morgan and Miles-Johnson (2022) used an interpretivist paradigm, utilizing cross sectional semi-structured interviews and grounded theory to analyze the data. Constructivist and interpretivist paradigms state that knowledge is constructed around specific contexts and that individuals develop their own subjective meanings of their context. The researcher would then look to explore the complexities of this and are asking questions that are more open-ended (Williams, 2007). It is my understanding that these paradigms reflect understanding cultural differences or other contexts that may affect data or how it is interpreted, which can then generate a deeper meaning or understanding of the information.

Roles of the Researchers

In qualitative research, researchers are interpreting and making sense of what they deem critical for an understanding of a phenomenon (Creswell, 2014). They are expected to monitor bias, select appropriate questions for interviews, and have competence in their area of study. The researchers are truly involved in each step and consider the different realities for each participant and reflect how their own background may influence their interpretations (Creswell, 2014). In the five qualitative methods articles that were selected, similar to the previous studies mentioned, most of the researchers did not clearly identify their roles in the research. In regard to governing bodies approving studies, all but one of them mentioned approval from The Indiana University Institutional Review Board (Bailey et al., 2021); The University of Illinois at Chicago Institutional Review Board and University of Chicago School of Social Service Administration/Chapin Hall Institutional Review Board (Canada et al., 2013); the University of Scheffield, School of Health and Related Research Research Ethics Committee (Horspool et al., 2016); and the Human Research Ethics Committee (Morgan & Miles-Johnson, 2021).

Two studies specifically identified each researcher's role. Bailey et al. (2018) identified that five of the six researchers contributed to the study design, while two collected and analyzed the data, wrote initial drafts, and contributed to the writing and three others worked on the manuscript. Horspool et al. (2016) identified one researcher was responsible for study design, applying for ethics approval, and conducting the interviews and analysis, while the second interpreted the data and revised themes, and the third secured the funding for the study. All of them were responsible for drafting the manuscript and approving the final version. The study by Morgan and Miles-Johnson (2021) did identify that the two main researchers have a special interest in how police institutions engage with diverse communities and vulnerable populations.

Participants

Sampling. Many of the studies focused on departments or cities that already had co-responding models in place. Bailey et al. (2018)'s study, examined a co-responding model targeting all 12 Mobile Crisis Assistance (MCAT) teams in Indianapolis. The teams consisted of police officers, paramedics, and mental health professionals who completed 320 hours of training together and were four months into the program. The researchers also interviewed nine stakeholder members; however, it was not explained how they were recruited. Some studies highlighted specialty trained police officers. The participants for Canada et al.'s (2012) study were selected from a broader study, which began collecting data in four police districts in Chicago in order to identify the impact of CIT in police encounters with individuals who have mental illnesses. The present study invited participants from the larger study to conduct interviews, and because the researchers wanted a broad perspective, they worked with the coordinators of the larger study in order to purposely select officers who were known champions of the CIT program, or who had either positive or negative perceptions. In Bailey et al.'s (2021) study, data was collected from calls regarding 628 participants in Indianapolis. Each of the participants received either a CRT (313 participants) or treatment-as-usual (315 participants) response. Of these participants, 61% were male and 56% were white, while 42% were Black and 2% were from other racial groups.

Recruitment. The study done by Horspool et al. (2016) took place in the UK at 2 separate locations. Police stakeholders were recruited from the police force that was running the program, and mental health stakeholders were recruited from two NHS trusts. Twenty-six individuals were invited through email to participate in the study, and 14 gave consent and were able to participate in the interview process. Nine of the participants were from the police force

and were male, while of the others were female mental health professionals. Canada et al. (2012) recruited their participants by sending a letter of invitation, followed up by a phone call in order to confirm willingness and gain consent from each participant. The researchers aimed to have a fair representation of different ranks, tenures, watches, and the receipt of CIT training in order to collect a representative sample. Participants in the study by Morgan & Miles-Johnson (2022) were all a part of one recruit squadron nearing the completion of their academy program training in one of the largest police academies in Australia. Ten police recruits participated in the study, with seven of them identifying as male and three identifying as female. They all completed 11 hours of theoretical mental health response training over a course of two days before their interviews, and the interviews were completed two weeks after the training was complete.

Other articles focused on the macro systems. Participants for focus groups were selected from community and mental health clinics, support groups, shelters, and advertisements that were posted in the newspapers and on bulletin boards. There were also police and health professionals who were recruited by word of mouth and email invitations. The participants involved in the key informant interviews were referred by service providers and nongovernment organizations who had significant exposure to the Mental Health Mobile Crisis Team (MHMCT). Those organizations were the Canadian Mental Health Association, the mental health outpatient department for the Capital District, the Healthy Minds Cooperative, the children's hospital, Emergency Health Services, and 4 homeless shelters. Purposive sampling was used in order to maximize the variation of the information that was provided. This means that participants were elected according to their ability to provide relevant data to the study in order to further inform the emerging theory.

Data Collection

Focus groups and interviews were the most common method of data collection with the studies identified. In Bailey et al.'s (2018) study, two focus groups were held with 6 MCAT team members in each group, lasting 2 hours each, with approximately 20 semi-structured questions to help guide the focus group. Three members of the research team were responsible for conducting the focus group, and they held a consensus meeting after each group with the meetings transcribed. There were also nine individual interviews conducted with stakeholders lasting 1 hour each, with 13 semi-structured questions. One author conducted the interviews, which were audio recorded and transcribed. Twenty participants agreed to participate in Canada et al.'s (2012) study, and the researchers completed in-person semi-structured interviews which were approximately 1-1.5 hours long. The interviews were held at locations and times that were convenient to each officer, and actions were taken to ensure confidentiality. Interviews were audio recorded, however three of the participants refused to be recorded so researchers took detailed notes throughout the interview. The data that was collected from the interviews that Canada et al. (2012), conducted were coded with identification numbers in order to keep participants anonymous. A cross sectional qualitative interview study was done by Horspool et al. (2016) involving 14 interviews either in person or over the phone. The interviews were on average 45 minutes long, ranging between 26 and 75 minutes. A semi-structured topic guide was created and was also piloted in order to ensure that the data collected addressed the aims of the study. The interviews were conducted until data saturation was achieved and field notes were also taken during interviews to prompt discussions. All audio recordings were then transcribed verbatim and checked for accuracy by a separate researcher. According to Morgan and Miles-Johnson (2022) the participants in their study were interviewed between 20 to 45 minutes each,

and the responses were recorded on a digital audio recording device and then transcribed into Word documents. The interviews were semi-structured, and each question was designed to elicit data that applied to the research study. It was not indicated how the recruits were selected or any other information that could impact their understanding of MHRT.

Unlike the previous studies, the researchers for Bailey et al.'s (2021) study developed their own system to collect the data for CRT members to input service calls, demographics, and response decisions. All CRT responses were recorded (318 calls) over the period of the study, and then were manually matched to a case in another police district in Indianapolis, that was treated as a usual case (Bailey et al., 2021). The cases that were indicated "treatment as usual" were selected after the consultation of police and mental health providers, and the researchers linked the data manually between the two study conditions, attempting to account for age, race, gender, and crisis call type (Bailey et al., 2021). Then, according to Bailey et al. (2021), the researchers conducted multiple group comparisons between the CRT responses and the treatment as usual responses, as well as follow up results to a BHU team which is a CIT trained officer and mental health clinician.

Data Analysis

According to Bailey et al. (2018), three members of the research team transcribed, reviewed, and coded the qualitative data. A grounded theory approach was used for coding, which allowed the researchers to identify any general patterns and identify coding categories. Grounded theory seeks to create a continuous interaction between data collection and analysis while giving the researcher the freedom to develop a hypothesis of general features found in data while referencing direct observations (Urquhart et al., 2010). Coders were able to classify themes within "barriers" and "facilitators". Researchers also independently coded three qualitative data

sources using software in order to promote inter-rater reliability. Afterwards, the team met to discuss themes and collaborated on identifying a final coding procedure for all of the qualitative sources. Canada et al. (2012) also used a grounded dimensional approach in order to analyze their data, which is a variation of grounded theory much like aforementioned studies. This was used to identify how CIT trained and non-CIT trained officers construct and respond to crises with individuals who have mental illness or are experiencing mental distress. Chunks of data were coded into different categories, and then were compared to each other in order to create an explanation. Once theoretical saturation was achieved, the researchers then synthesized the data into an explanatory framework in order to create a detailed description. The researchers also analyzed and compared themes that emerged, and this process of developing the theory was done in collaboration with each other. Once the data was collected for Morgan and Miles-Johnson's (2022) study, a systematic method was used to analyse the data from the Word documents, by coding for different themes in the responses that were provided. A two-stage data analytical process was utilized in order to identify key concepts, resulting in three core themes. Each of the themes were then assessed, utilizing a procedural justice framework in order to apply interpretation and meaning.

Two studies focused on comparing themes and identifying any differences between sites that implemented programs and sites that did not. In order to analyse the data for the study by Horspool et al. (2016), a framework analysis was conducted in order to identify any themes related to the implementation of the street triage service using Nvivo qualitative software. This allowed researchers to systemically consider similarities and differences within the cases. Also, this approached helped in identifying any themes. Two researchers then read the transcripts to identify a thematic framework, and expanded them into key themes and sub themes. The

researchers consulted and revised the frameworks after collaborating and discussing. According to Bailey et al. (2021), in order to analyze the data collected the researchers conducted propensity score matching. Propensity score matching is a technique used in order to compare outcomes between control and treatment groups and draw conclusions or estimate impacts of an intervention (Austin, 2011). Then to evaluate the scores, they assessed the standardized mean difference before and after matching. Furthermore, they estimated weighted logistic regression models when analyzing emergency detention and boking outcomes, as well as arrests and EMS contacts. It was also stated that they reported predicted probabilities by using average marginal effects and chi-square analyses.

Methodological Limitations and Recommendations

Research Paradigms

It is important to be aware that there will always be limitations in research regarding paradigms, as any study centers on the worldviews of the participants as well as the researchers conducting the studies. I tried to collect a wide variety of articles that utilize many different approaches, and by collecting studies that are qualitative, quantitative, and mixed methods studies. I hope to represent different paradigms in order to paint a more detailed picture of the research question at hand.

Roles of the Researchers

As indicated in the methodological analysis above, the role of the researchers was not always clearly defined. While 8 of the 10 studies mentioned approval from review boards, only 4 of them clearly identified the role of the researchers. It is important to understand the researchers' motives and intentions by collecting information and gathering knowledge on the backgrounds of the researchers so that we can understand the lens that they were collecting and

analyzing their data. When the roles of the researchers are clearly identified, it creates a more transparent history which can indicate whether there was a chance for biased interpretations, or identifying gaps that should be further examined.

Participants

It is important to acknowledge the lack of diversity represented in the participants of these studies. By only focusing on the experiences of the police officers the studies are missing a huge gap that represents how the individuals undergoing a mental health crisis feel support or unsupported by police and the impacts police responses has on them. Also, I believe it is important to gather more information on cultural background, socioeconomic status, sexual orientation, etc. as these are all factors that influence an individual's mental health and the supports that they can access. We need to take into consideration the locations where these studies were done, do they represent majority of people or just one sub-set? Do police responses differ when supporting an individual with a mental health crisis in an affluent neighborhood versus one who is houseless? This data is important to collect in order to ensure proper care to individuals, which these studies did not do.

Secondly, it was not always disclosed why specific sites were chosen or how participants were identified to be invited to participate. This makes it more difficult to decipher what other factors could possibly be impacting the types of police responses to mental health crises, as well as if the participant participation was voluntary or mandatory as that could impact responses as well.

Data Collection

The researchers in these studies collected data in various means: databases, interviews, surveys, focus groups, and observations, while some had to develop their own coding systems,

questionnaires, and interview questions. I wanted to include studies that collected information through databases as well as more personable methods such as interviews as I wanted to capture a wide scope of data collection and make note of any differences. One thing that was observed was the information that was collected through interviews or observation better highlighted some struggles or gaps in the research as it allowed participants to expand on their ideas on what they thought the barriers to co-response teams or mental health training were, and that type of information cannot be gathered through a database.

A critique of some of these studies are that not all of them provided information on how confidentiality was kept or did not explicitly include what questions were asked, which makes it difficult to identify further gaps in the research.

Data Analysis

Identifying themes was the main way to analyze the data throughout the majority of the studies. There are always limits to data analysis in the sense that identifying themes can be a biased process if the researchers are not careful. They need to identify similarities and differences across programs, types of services offered in response, types of mental health calls, and key concepts in response to questions. The researchers are then responsible for applying interpretation and meaning to these themes that were identified, which should be carefully identified how that was done in order to ensure credibility.

Summary of Methodological Analysis

All of the 10 articles selected shared many means of collecting and interpreting data in order to offer a wide variety of information. Direct quotes from police officers, observations from ride-alongs, databases analyzed to identify themes or changes after different policing interventions were implemented all contribute to the overarching themes that were identified.

The strengths that these studies share is that they were all clearly able to identify limitations in regular policing practices but also highlight the barriers to these newer approaches that many police departments are trying to implement. They are able to push the conversation into new directions and take things a step further by recommending further systemic change.

Findings

Nature of Crisis Calls

The reviewed studies highlighted many strengths and barriers to the use of co-responding models and specialty training programs in comparison to regular police training. Many factors were taken into consideration such as how these different police responses impacted officer preparedness in responding to mental health calls as well as barriers such as lack of treatment service providers, lack of proper coordination, as well as stigma experiences by the officers. The table below provides a clear outline of the themes that were derived.

Table 2

Findings Related to the Literature

Theme	Subtheme
Types of police response to mental health	Co-responding models
	Specialty training programs
Officer preparedness in responding to mental health calls	
Other barriers	Lack of treatment service providers
	Lack of proper coordination and stigma

According to Godfredson et al. (2011) approximately 20% of people officers come into contact with have mental illnesses, and Yang et al. (2018)'s study reported 80% of officers stated

that they encountered individuals with mental illnesses at least once a week. The factors that officers most often cited to as evidence of mental illness were speech, behaviors, appearance, violence, and body language; looking at person-based information before police sources or medical practitioners (Godfredson et al., 2011). According to the findings in the study by Wood et al. (2017) it was highlighted that most calls involved responses to people who were regarded as being disruptive or making others feel uncomfortable in how they were acting. Many calls were related to disputes among neighbors or within families who felt uncomfortable or incapable of handling someone with a mental illness. Often times, lack of medication adherence was a common topic of conversation, as well as experiences of homelessness (Wood et al., 2017). Many stories were shared about how officers have a general understanding of mental health and some of them are able to negotiate with individuals or build enough of a relationship with them that they are able to deescalate situations and ending the encounter on good terms. They often need to choose provisional remedies that draw on their knowledge if possible that they gained by working with these individuals before in the past or other individuals like them. The researchers also found that many officers are familiar with the communities that they work within and have a basic understanding of some of the troubles or difficulties that individuals may have based on the community they are in. It also helps to be aware of the mental health resources or accessibility to these resources within these communities and take that into consideration when dealing with them.

Lastly, when negotiating peace with complainants and call subjects, Wood et al. (2017) indicated that many officers reported they are the ones with the authority and capacity to overpower resistance to certain attempted solutions if needed. The officers work to please both the party that made the initial call, as well as the individual whom the call was made about. The

officers reported that they need to try and have an understanding of both sides and make the best call on when and how to act. The researchers highlighted a gray area where officers try to act as peacekeepers, and the most important tool for them is the knowledge that they accrue over time about the circumstances of the individual people and places (Wood et al., 2017).

Types of Police Response to Mental Health

Co-Responding Models. According to Horspool et al. (2016) there are many benefits to a co-responder model such as stakeholders feeling like people with mental health problems were actually being helped, shared decision making between police officers and organizations with more mental health knowledge, as well as improved understanding and improved information sharing policies between said organizations. Bailey et al. (2021) stated that the short-term outcomes resulted in a conclusion that co-response team (CRT) participants were less likely to be arrested and immediately booked into jail, especially for Black participants in comparison to the treatment-as-usual participants. Black CRT participants also had lower rates of re-arrest compared to Black participants in the treatment-as-usual group at the 12 month follow up.

Although the findings suggested that there was little evidence in reducing the likelihood of an immediate arrest when utilizing CRT responses, the evidence did suggest that the CRT was in fact effective in reducing the reincarceration risk among Black individuals. The study also suggested that "without adequate treatment engagement, CRTs are unlikely to have a long-term impact on subsequent emergency services utilization" due to the barriers regarding lack of treatment services available in general for individuals to be referred to as well as other systems-level barriers to access to treatment (Bailey et al., 2021, p.372).

Specialty Training Programs. According to 8 of the studies, it was found that specialty trained officers were more likely to report feeling more prepared, were more likely to apply a

mental health tag to incidents, were more likely to connect individuals to outside resources, and were on site for more mental health related calls, resulting in fewer arrests (Bailey et al., 2018; Bailey et al., 2021; Canada et al., 2012; Godfredson et al., 2011; Horspool et al., 2016; Scantlebury et al., 2017; van de Brink et al., 2012; & Yang et al., 2018). These studies reported that officers who were specially trained in mental health reported a more comprehensive assessment of potential danger and an understanding of why individuals with mental health issues may exhibit certain behaviours (Canada et al., 2012; Yang et al., 2018). It was also found that specialty trained officers found it easier to respond to individuals who are experiencing issues with mental health, and were better at identifying specific techniques that they used, such as talking through situations instead of command-and-control techniques that are provided in basic police training (Canada et al., 2012).

Studies highlighting specialty trained officers reported being better prepared, having more options, and had a better understanding of the circumstances (Canada et al., 2012; Yang et al., 2018). In Canada et al.'s (2012) study, the non-CIT officers appeared to be more likely to find that their options were limited to hospitalization when dealing with individuals in crisis with mental health needs, versus the CIT trained officers who reported that they were able to refer to mental health agencies, transportation to doctors, or providing other resources to the individuals. The study by van de Brink et al. (2012) found that police play an important role in referring people to mental health supports because of the large number of individuals they come into contact with experiencing a mental health crisis. Of the individuals that the police come into contact with experiencing these crises, half are not in contact with mental health services at the time. It was also discovered that police are responsible for linking these individuals (21%) into contact with mental health services. It was also found that the likelihood of care contact (follow

up) after a crisis are related to whether or not the police make these connections to mental health services. After analyzing what could be called the gray-zone of police work, Wood et al. (2017) highlighted CIT training as an important compliment to aid police officers in their decision making when responding to mental health related calls.

Officer Preparedness in Responding to Mental Health Calls

Due to officers being the most likely to come into contact with individuals experiencing mental distress, it is important that they feel prepared and well resourced. Officers are often required to make decisions when dealing with mental health encounters that can be difficult to accomplish due to "structural conditions that perpetuate their vulnerability" (Wood et al., p. 96, 2017). The findings in the study by Morgan and Miles-Johnson (2022) indicated that the new recruits felt that not enough time was spent on mental health response training. They reported that they needed more in depth and ongoing training in order to appropriately respond to individuals with mental illness and that the training provided was "basic and generalised" (Morgan & Miles-Johnson, 2022, p.9). The participants indicated that once they are policing, they would need to adapt by learning from their superiors and other officers in the field. It was also implicated that the academy training neglected to address cultural and geographical nuances in teaching ethical police responses.

Many of the studies reported large differences regarding specialty trained and non specialty trained officers when dealing with these types of calls. Non specialty trained police officers reported feeling unprepared or not well resourced and having a lack of knowledge regrading mental health (Bailey et al., 2018; Canada et al., 2012; Godfredson et al., 2011; & van de Brink et al., 2012).

Other Barriers

Lack of Treatment Service Providers

In Godfredson et al.'s (2011) study, in response to which outcomes was used most frequently in responding to individuals with mental illness, mental health apprehension was rated the highest, followed by arrest, then referral to another agency. When asked about challenges, 809 challenges were reported by participants. The main four themes identified were gaining support from mental health services, communicating with the mentally ill, avoiding violence, and cooperation and compliance. Many studies highlighted that a lack of treatment options is a significant barrier to implementing more effective services to individuals experiencing mental health issues (Bailey et al., 2018; Godfredson et al., 2011; Horspool et al., 2016; Scantlebury et al., 2017; & Yang et al., 2018). For instance, in Bailey et al.'s (2018) study MCAT team members would make referrals or guide individuals to resources, however it did not guarantee that the individual was going to have their needs met. An MCAT stakeholder shared that instead of delivering training to teams as one of the initial steps to implementing the program, they wished that more effort was placed on expanding treatment services, stating that limited resources lead to burnout and frustration for team members. In Yang et al.'s (2018) study, while 88.4% of the officers surveyed agreed that as first responders they had a duty to help provide information and resources to individuals with mental health issues, only 50.7% of them stated that they were satisfied with the options available to them in order to resolve those calls.

A possible solution to this was addressed by Horspool et al. (2016) by exploring the key aspects of a Street Triage service. Under this theme, key aspects were: street triage operating models, tailored service for local need, referrals to mental health services, and appropriate staff

and rostering. The findings in Horspool et al.'s (2016) study highlighted the benefits and deficits to each differing operating model. Participants identified that being able to consider geographical location and population size of jurisdictions made a difference in which operating models were best suited. In some areas, phone service was an issue, so having a mental health worker in a Joint Response Car trying to call their own services was sometimes a struggle. Also, police service boundaries sometimes added extra difficulties as officers would need to identify which NHS Trust was responsible for care when responding to some mental health incidents. This creates added problems when referring to additional mental health services. Otherwise, having a mental health worker on scene seemed to be beneficial as they were familiar with all of the services in the area and were able to assist with referrals. A barrier to this was long wait times for services or limits to what each service could offer.

The second theme was perceived benefits of street triage, which had the following key aspects: helping people with mental health problems, shared decision making, improving understanding between organisations, and improving information sharing policies. The stakeholders involved shared they had a positive perception of the Street Triage service as they believed it helped the individuals who needed it. It was noted however that participants felt that some officers who were not part of the service were not as enthusiastic about combining police work with mental health, and stated that it could pose some challenges with implementation. When it came to making decisions regarding an individual and their mental health, having that shared decision making was useful as some officers were described as having a lack of knowledge regarding mental health. They identified that having both the police officer and the mental health worker make joint decisions as useful and enabled police to utilise different options. Another benefit that was identified was improving communication and understanding

between organizations, as well as how information is shared. By having the Street Triage, each party were able to better understand each role and support as needed, as well as enhancing access to information in order to help with decision making. One barrier to this that was identified was the differences in technology that the police department and mental health workers use (Horspool et al., 2016).

Lastly, the final theme was service development and future directions, which looked at focus on frequent service users and reducing police involvement in mental health crises. The participants in the study identified that while having the Street Triage is a great first step, other pathways need to be connected in order to help with the follow through. One location developed an Integrated Recovery Programme in order to meet the needs of the individuals who accessed the services regularly. That next step aided in reducing the amount of calls as well as it was providing more services to the individuals. It was also mentioned by a participant of the study that a goal would be able to reduce the need for police involvement in mental health crises altogether unless there were immediate safety concerns. The key challenge to this was identified as lack of additional funding for mental health services to be able to do this (Horspool et al., 2016).

Lack of Proper Coordination and Stigma

Role conflict and dealing with stigma were other findings that surfaced throughout this study. Due to the training that Morgan and Miles-Johnson (2022) reported on, the recruits did identify that their perceptions of mental illness changed in a positive manner as they feel more compassionate towards these individuals and feel they have an increased level of awareness of the types and pervasiveness of mental illness in their society. According to the discussions during their interviews, some recruits identified that there is still a stigma within the policing

systems and concerns regarding building trust and rapport came forth due to officer bias as well as categorizing individuals with mental illness as dangerous, which impacts police interpretations.

According to Bailey et al. (2018) officers stated that other officers who were not a part of the program or other first responders like firefighters did not take the team seriously, often making collaboration more difficult. The MCAT officers mentioned that they felt having uniforms that still clearly identified them as a police officer would be beneficial as they would not get confused for a mall cop or animal control. Despite the stigma, the MCAT leadership team stated that they wanted the officers to not present as cops as they felt it would help individuals respond to them in a more appropriate matter, gaining trust and building relationships. It was also found that because of the little oversight of how the teams would operate, there was much flexibility but lack of direction which made team members confused and frustrated. Statements were also made that due to leaders not publicizing the team or networking within the community, many other agencies and first responders had no idea who the MCAT team was. This caused disconnects between officers and other agencies or healthcare providers, which made them feel as though the lack of external communication contributed to them not being well coordinated.

Despite these challenges the studies reported, many of the studies mentioned that the ability for each team member and agency to learn about each other, adopt skills from one another, share resources and information with each other, and team build were some of the most useful aspects of implementing these programs (Bailey et al., 2018; Horspool et al., 2016; & Scantlebury et al., 2018). This was said to result in a greater ability to provide services and follow up with patients during and after their moments of crisis. According to Bailey et al. (2018), it was noted in the study that stakeholders expressed the importance of having the team

and agencies triangulate information through case coordination, as combining the skills and resources from each member created a strong team, allowing these programs to operate as a functioning unit.

Lastly, it was indicated in Morgan and Miles-Johnson (2022)'s study that the recruits highlighted the importance in understanding mental illness and de-escalation practices as integral in future policing practices. Although not all of the recruits felt that responding to individuals with mental illness was a core policing duty, it was indicated that most of them were more accepting of the role after receiving the training. That being said, most of the recruits felt incompetent in de-escalating a mental health crisis due to a lack of confidence, an overreliance on theory, and the risk that some individuals experiencing psychosis could be considered high risk, thus resulting in unnecessary responses from officers. Most of the recruits believed that communication strategies and building trust and rapport would be valuable in responding in a more appropriate manner.

Ethical Considerations

Many professionals have ethical guidelines that they are required to follow, including mental health professionals, police officers, as well as researchers. Vanclay et al. (2013) published a paper to identify current principles for ethical research by drawing on guidelines found in textbooks in social research methods, national statements regarding ethical conduct in research, and code of ethics of international agencies and professional associations. The ethical principles that were discussed include:

Respect for participants, informed consent, specific permission required for audio or

> video recording, voluntary participation and no coercion, participant right to withdraw, full disclosure of funding sources, no harm to participants, avoidance of undue intrusion, no use of deception, the presumption and preservation of anonymity, participant right to check and modify a transcript, confidentiality of personal matters, data protection, enabling participation, ethical governance, provision of grievance procedures, appropriateness of research methodology, and full reporting of methods (p.243).

Psychologists in Canada have an ethical guide of four basic principles: respect for the dignity of persons and peoples, responsible caring, integrity in relationships, and a responsibility to society. These are all part of the *Canadian Code of Ethics for Psychologists* (Canadian Psychological Association, 2017). These principles in the *Canadian Code of Ethics for Psychologists* highlight a specific code of guidelines for ethical decision making and standards when members are acting in research. According to the *Health Professions Act (HPA)* there are some *Standards of Practice* of the College of Alberta Psychologists that identify professional and ethical standards for all regulated members (College of Alberta Psychologists, 2019). These standards include obtaining written signed informed consent before conducting research, have and maintain competence in their professional services, provide supportable services, maintain records, provide continuity of care, be aware of dual relationships, and protect confidentiality.

Based on the articles I analyzed I noticed that some, but not all, important ethical considerations were being met according to the *Canadian Code of Ethics for Psychologists* (Canadian Psychological Association, 2017) and the *Standards of Practice* (College of Alberta Psychologists, 2019). The researchers in these studies had a responsibility to conduct ethical research by receiving proper consent, protecting privacy of participants, and promoting integrity of their research (Creswell, 2014). Researchers' main responsibility when collecting data is to

minimise exploitation and maximise confidentially (Truscott, 2013) while ensuring their process of analysing the data is credible reliable. In order to do this in a culturally appropriate way, other diversity factors such as race, gender, sexuality, socioeconomic status, disability, etc. need to be considered. The studies that were selected for data collection and analysis did not focus on the cultural impacts or explore the impacts of the imbalance of power and privilege.

When conducting and publishing research, approval of a proposal from an ethics board is required in order to ensure that ethical standards are being met (Creswell, 2014). Of the 10 studies that I reviewed, 8 of them indicated approval from an ethics board. Godfredson et al. (2011), clearly stated within their studies that they received full ethical scrutiny and approval. Bailey et al. (2021), Canada et al. (2013), Horspool et al. (2016), Morgan and Miles-Johnson (2021), Scantlebury et al. (2017), Wood et al. (2016), and van den Brink (2012) briefly identified approval themselves, while Bailey et al. (2018) and Yang et al. (2018) did not mention any approval by an ethics board.

Informed Consent

According to the *Standards of Practice* obtaining informed consent includes clearly identifying the purpose and nature of the activity, mutual responsibilities, protections to confidentiality, benefits and risks, likely consequences, option to withdraw consent, and how long the activity or service will take (College of Alberta Psychologists, 2019). There was a limitation in many of these studies due to a lack of explicit identification of how many of the guiding principles listed above were met. Some of the researchers clearly identified how consent was obtained (Canada et al., 2012; Godfredson et al., 2011; Horspool et al., 2016; Morgan & Miles-Johnson, 2022; Yang et al., 2018) while others did not disclose that information (Bailey et al., 2021; Bailey et al., 2018; Scantlebury et al., 2017; Wood et al., 2017; van de Brink et al.,

2012). Consent was obtained mostly by sending email invitations asking people to participate and allowing them to choose, identifying that participation was voluntary, or by providing the option to opt in or out during in-person data collection (Horspool et al., 2016; Morgan & Miles-Johnson, 2022). In some instances, data was obtained through databases where names or identifying information were not collected for the studies, however only one study clearly disclosed how they obtained access to those databases (Yang et al., 2018)

Debrief

None of the studies mentioned identified specifically how participants were debriefed about the research being done (Bailey et al., 2021; Bailey et al., 2018; Godfredson et al., 2011; Horspool et al., 2016; Morgan & Miles-Johnson, 2022; Scantlebury et al., 2017; Wood et al., 2017; van de Brink et al., 2012; Yang et al., 2018), which goes against Section II.47 under Responsible Caring in the *Canadian Code of Ethics for Psychologists* (Canadian Psychological Association, 2017). However, in Canada et al.'s (2012) study, the researchers did identify that they sent letters of invitation to the study participants and followed up with a phone call to confirm their willingness to participate and confirm their consent by selecting dates and times that were convenient for them to conduct their interview. Due to the detailed report of how confidentiality was respected and consent was obtained, I believe it would be safe to infer that the researchers in this particular study took it upon themselves to debrief with the potential participants what to expect with the interviews while receiving their consent, although it was not clearly mentioned in their study that this was done. In the study by Horspool et al. (2016) the researchers created a semi-structured topic guide in order to address the aims of the study with the participants which is a strategy used to debrief what the interview process looks like before participants fully consent.

One study included a section that identified the researchers reporting no conflict of interest and detailed notes providing more information regarding the study, such as clarifying terminology, noting the difference in the amount of mental health related training and other fields, providing more detail on the survey questions or codes, etc. (Yang et al., 2018). This is helpful as it indicates that the researchers were attempting to be as ethical as possible in regard to this study, and they are able to identify areas that needed more explanation in order to further validate their study.

Protection of Participants

According to sections I.31- I.36 of the *Canadian Code of Ethics* under Respect for the Dignity of Persons and Peoples, protecting vulnerable individuals and groups is necessary (Canadian Psychological Association, 2017). None of the studies identified if participants were provided any supports afterwards if needed, however some studies indicated how care was taken when working with participants. For example, in Horspool et al.'s (2016) study it was highlighted that the interviewer who conducted the interviews was a health services researcher who had a MSc level education and previous experience of conducting interviews. This shows great care in ethical interviewing, and when collecting data through databases, the researchers in Scantlebury et al.'s (2017) study identified in regards to having individuals tagged with a mental health label, the appropriateness of those mental health tags were checked by an independent mental health professional.

Some studies did go into great detail how consent was obtained and how they were able to keep their data confidential which I believe contributes to the protection of participants involved. The researchers in Canada et al.'s (2012) study clearly identified how researchers were able to accommodate to the participants, by allowing them the choice on where they met, how

they kept the information confidential, and allowed them to be audio recorded or have written notes taken throughout. One thing to note however is that in the quotes that were used in the study, some of the participants speak about specific instances about dealing with people on the street. Some quotes are a little specific and if an individual were to read the study and recognize that it was them or someone they know, that could cause harm or extra stress to the individual that the participant was speaking about, as it does not protect anonymity.

Other studies did not indicate how such care was taken in order to protect participants. Researchers in Bailey et al.'s (2021) study collected first and last names of individuals who were incarcerated through the Marion County sheriff's office and it was not stated if they received consent from those individuals or if they informed them of the use of their information in their study. It was also not indicated if or how that information was protected which I consider an ethical consideration.

Integrity in Relationships

Principle III: Integrity in Relationships speaks to a responsibility psychologists have to adhere to ethical practices when conduction research, including considering when deception is used (Canadian Psychological Association, 2017). Not all studies identified how deception was taken into consideration when researchers were collecting their data (Bailey et al., 2021; Bailey et al., 2018; Canada et al., 2012, Godfredson et al., 2011; & Horspool et al., 2016). In the study by Godfredson et al. (2011) participants were provided a questionnaire to complete and leave in a box, whether or not they completed it or not. However, because the questionnaire relied on self-reporting methods, there is a risk of social desirability occurring. Also, due to the scope of the research, causality and directionality of relationships between the variables involved is open to interpretation, which could affect reliability of the study. In van de Brink et al.'s (2012) study,

researchers accessed police records and searched calls to the police during a period of one year regarding mental health crises. In the records, the written accounts from the police officers are what were assessed. This could potentially show bias as it is only the officers' perceptions of the situations and that was not noted in the study.

It was also stated in the study by Scantlebury et al. (2017) that officers were unable to be blind due to the nature of the intervention, so it was not feasible for the participants to be unaware of which group they were allocated to, although they were not officially informed. Blinding refers to withholding certain information from the participants in the study in order to minimize potential for bias and maximize validity (Christian et al., 2020), so being unable to mask the assignment of the officers in each group directly impacts reliability of the study. Scantlebury et al. (2017) also mentioned in their study that here was contamination between both the control group and the intervention group as some officers from the control group received the specialized training inappropriately, which means it would be possible that colleagues discussed their trainings with each other. These issues could have diluted any intervention effects if there were any (Scantlebury et al., 2017).

Confidentiality

Protecting confidentiality of clients is the 12th standard in the *Standards of Practice* that involves informing participants the limits of confidentiality, and the steps taken to ensure privacy legislation (College of Alberta Psychologists, 2019). Most studies provided enough information to infer that identifying information was protected to protect the privacy or confidentiality of their participants such as leaving questionnaires in concealed boxes or envelopes or not providing names of the participants in the study (Godfredson et al., 2011; Horspool et al., 2016; Wood et al., 2017; van de Brink et al., 2012; Yang et al., 2018). However, some of the studies

clearly indicated which departments were involved and the ranks of the officers, which could potentially be identifying information if the departments are small. For example, in Bailey et al.'s (2018) study no names were identified however specific job titles were listed. Due to the specifics of the program, it could potentially be simple to identify the professionals involved.

Some studies were very clear in how confidentiality was maintained. Canada et al.'s (2012) study identified the lengths they undertook such as respecting whether or not the participants consented to being audio recorded and ensured there were conference rooms made available to conduct the studies and keep responses confidential. They even highlighted how they coded their data when identifying the participants' choice to participate or not in the study in order to keep the participants and their districts anonymous. The researchers in Horspool et al.'s (2016) study indicated that they omitted names of each location as well as avoided using names of participants throughout their study in order to preserve anonymity, while Morgan and Miles-Johnson (2022) indicated that in order to de-identify the police recruits in the study, non-gender specific pronouns were used. Ethnicity, gender, and age were specified in order to acknowledge that these factors could potentially influence their perceptions on the effectiveness of mental health response training as well as their future engagement with individuals with mental illness in the field. The researchers in Yang et al.'s (2018) study also indicated that data that was not included was officer age, race, or gender, which was done to prevent identifying individual officers in the study.

Withdrawal

None of the studies identified if participants were informed on how to withdraw consent (Bailey et al., 2018; Canada et al., 2012; Godfredson et al., 2011; Horspool et al., 2016; Morgan & Miles-Johnson, 2022; Scantlebury et al., 2017; Wood et al., 2017; van de Brink et al., 2012;

Yang et al., 2018)**.** While it can be assumed that these studies were all approved by ethics boards as it is mandatory, best practice would involve a clear explanation of the ethical processes that were followed in the studies. This goes against both the *Canadian Code of Ethics for Psychologists* (Canadian Psychological Association, 2017) and the *Standards of Practice* (College of Alberta Psychologists, 2019) by not clearly addressing informed consent and procedures involved to withdraw consent.

Implications

Reflexivity of the Researcher-Practitioner

Reflexivity in research is defined as the researcher having an awareness of their role in the research, and acknowledging the ways in which they affect the process and outcomes (Haynes, 2012). In order to be transparent about my methods of thinking regarding this research, I need to be open about my thought processes and my background as I conducted my study. I have worked with vulnerable populations over the last ten years, and specifically with individuals who were recently housed within the last two years. Through my work, I have met many individuals who faced systemic barriers while dealing with the policing and justice system. I have noticed that there were not many positive stories in how police responded to calls in which my participants described themselves as having “an episode” related to their mental health. I also have immersed myself in social justice causes and spent countless hours listening to stories and reports by individuals and news outlets highlighting deaths and trauma that individuals have faced when police are intervening. I also have a family member who took police and investigative studies and works with peace officers. I have asked her questions on the amount of training they receive regarding mental health, what their responses are, and her experience working in a hospital setting. She has shared with me her own insights and lived

experience of being in a role similar to policing and what challenges she and her colleagues have faced. She has shared with me the problems she has noticed within the system of policing and due to her own social awareness, how she believes more training, screening of individuals applying for these roles, and co-response teams would be beneficial.

Secondly, part of my role is social work related. I have received countless hours of de-escalation training, trauma training, and training regarding different types of mental illnesses and best practices when working with individuals with these illnesses. Social workers enter homes on a regular basis and are often able to intervene during crisis calls while connecting the individual to proper supports. Social workers do not carry guns and typically do not have an authoritative role, yet are able to walk into potentially dangerous situations and meet the individual where they are at. This is due to extensive training and understanding individuals and how gentler responses are often more helpful. I have seen in my own experience if I have a "large" presence, such as if I enter the room with someone who is feeling vulnerable and scared, or even threatened, they do not respond as well as they do if I have a softer approach. This knowledge helps form my thought process in the importance of understanding mental health in dealing with crisis calls, as well as the importance of understanding the types of people who are responding to these calls.

These insights and experiences have created somewhat of a bias for myself as I already had felt that traditional police training programs were not sufficient enough in dealing with mental illness and that there was a stigma. In order to keep objectivity of the data and overcome my bias I searched for studies that highlighted police officer insights, direct from the source. There was limited recent research on this topic when I first began this review, which meant that I was unable to be picky when choosing studies. This helped to mitigate my bias as I was forced to use articles that I felt may refute the point I was hoping to make, however they added more depth

and highlighted some important barriers to some of the CIT teams or specialty training programs, which is truly what research is about. My hope is that we can begin to identify best practices and decrease the amount of harm caused on individuals who are experiencing a mental health crisis while also ensuring they are being connected to the proper supports, while also supporting police officers and inviting a healthier environment for them to address their own mental health.

Clinical Applications

The reviewed articles show how police responses towards mental health crises are important in the continuity of care for these individuals (van de Brink et al., 2012) as well as understanding that there is a history of police responses causing harm and the need to make changes to these systems (Steadman et al., 2000). There are a few different aspects that could influence how mental health crisis calls are responded to. The importance of police records being recorded properly and the data managed ethically when recording incidents has been noted as often mental health issues are not identified to begin with (Scantlebury et al., 2017). Understanding the impacts to individuals undergoing a mental health crisis, the articles also highlighted the important role that police officers have as frontline professionals in making these connections to other supports and the need for officers to be competent in recognizing and handling these crises (van de Brink et al., 2012). Researchers in these studies also acknowledged that it is highly important for there to be an existence of psychiatric services that allow police referrals, as well as acceptance by police officers that mental health response is an important piece of the role (Kisely et al., 2010). Bailey et al.'s (2018) study highlights the need for police to utilize co-response teams as well as the importance of all involved agencies and general community's support while executing their tasks, and it has been shown by these studies that

officers who are specialty trained use less force and can appropriately link individuals to the appropriate services rather than arresting them (Canada et al., 2012).

Mental health professionals should be aware that more training on mental illnesses should be provided to everyone. There is a high need for police to be trained in responding to mental health as well as have more programs collaborate in response to these types of calls (Kisely et al., 2010), such as the use of co-response teams or resource sharing. There are still barriers to these responses due to stigma or bias about mental health, and often discrepancies in roles or information when utilizing these approaches (Horspool et al., 2016). Implementing more programs that police could refer individuals to rather than arresting them would be a positive direction as it has been shown there are not enough programs available for referrals and both individuals and officers benefit from them (Borum et al., 1998; Canada et al., 2012; & Wood et al., 2017). The officers who worked directly alongside the mental health system gave the highest satisfaction ratings according to Borum et al. (1998) so it could be a beneficial way to help bridge the gaps in service where the policing system and mental health system has yet been able to connect and create cohesive dynamics.

Importance of Police Mental Health

Understanding the importance of the mental health of police officers is crucial to understanding how they view mental health as a concept, as well as ensuring their own mental health is not interfering with how they are interacting with civilians. The National Alliance on Mental Illness provides some strong recommendations for police officers that I felt was beneficial to share to build resiliency and wellness for officers themselves and each other, as well as for law enforcement leaders to implement. They recommend interventions such as providing practical help, offering to talk, listening attentively, offering reassurance, and leaving a number

to call to reach out or a 24-hour helpline (National Alliance on Mental Illness, 2022). These interventions are useful across the board when supporting someone, and are great skills not only for officers to use with each other, but when dealing with individuals as well. The National Alliance on Mental Illness also suggested leaders form workgroups to decide which types of mental health supports would be beneficial, such as annual wellness checks or further education. Hiring credible mental health professionals familiar with trauma and assigning a mental health manager was also recommended in order to evaluate policies and implement mental wellness programs. Revising policies and procedures after critical incidents would be another strategy that could be beneficial in order to help officers debrief an incident without having to re-live it and have the appropriate supports in place, such as mandatory wellness checks. Lastly, being prepared by building close ties with community and promoting a positive, stigma free environment within the agency was suggested as well (National Alliance on Mental Illness, 2022).

Impacts on Mental Health on Individuals

I believe that it's beneficial to understand the impacts of police responses to mental health and make changes to our systems in how we respond to them. DeVylder et al. (2018) conducted a study by surveying 1000 individuals in order to examine the association between exposure to police violence (physical, sexual, psychological) and concurrent mental health symptoms. It was found that police violence was commonly reported (especially among sexual and racial minorities) and that exposure to this violence was associated with greater risks of psychological distress, depression, and suicide attempts. According to DeVylder et al. (2020), over the last few years there has been a new public narrative emerging focusing on the prevalence and effects of police violence, especially towards minority communities. They

focused their theoretical framework on exploring the relevance of this police violence to mental health, concluding that police responses and police culture could expose individuals to further violence and contribute to risk factors for mental distress. I understand that advocating for and supporting individuals who are navigating these systems or experiencing mental distress is important and beneficial to all, and that mental health education is an important step in recognizing intersectionality (YW Boston, 2007).

Scientific Knowledge

There are a few patterns of risk factors for police officers that are associated with adverse mental health outcomes. Consistently, neuroticism, introversion, passive coping or avoidance, and low levels of social support have been found to be risk factors for all adverse mental health outcomes in officers (Sherwood et al., 2019). Studies also show that personality types can be valid predictors of police performance, however there has been a limited number of studies focusing on how these personality traits are associated with the perception of forensic disciplines (Zakariyya Muhammad Sarki, & Geshina Ayu Mat Saat, 2020). According to Falkenbach et al. (2018), traits of psychopathy may be more prevalent in police officers compared to the general population. This includes traits such as fearless dominance or cold-heartedness which could potentially make an individual more likely to not follow the rules or use excessive force (Falkenbach et al., 2018). Screening for mental health when recruiting police officers could prove to be beneficial in identifying mental illnesses and providing supports and guidance as needed, as well as prevent further harm.

Well-Being of Society

With how prevalent mental illness is in society and the exposure that police officers have in responding to mental health related calls, it can be inferred that first responders can be somewhat responsible for providing adequate care. This could look like responding in a trauma-informed manner, or connecting the individual to proper supports, as indicated throughout this paper. Police officers serve and protect the public, and it appears accounting for mental health is an important contributor to that. Canada et al. (2012) identified a couple of factors that stood out regarding influences to police response and influences police response has on individuals they are dealing with:

> Although it may be useful for police to be able to identify an individual as having a mental illness, one study found that police response is more strongly influenced by characteristics of the situation and subjects‘ behavior than officers‘ knowledge of whether the subject has a mental illness (Watson, Corrigan, & Ottati, 2004). Ruiz (1993) argues that because subjects’ behavior can be influenced by officers’ posture, positioning, time involvement, language, and communication style, all of the foregoing factors should be altered when working with someone with a mental illness, ideally through specialized procedures and protocols within police departments. (p.2)

Accounting for mental health can be utilized in other forms of police and investigations as well. It was revealed in a study by Geijsen et al. (2018), that psychological vulnerabilities can interfere with police suspects’ responses, thus putting them at risk for providing an unreliable statement or a false confession. They also noted a finding that 60.4% of the suspects needed a more comprehensive mental health examination, which demonstrate that when meeting with suspects in an interrogation room, police officers will frequently meet vulnerable suspects. If

police have a better understanding of mental health, they may be able to provide adequate care across the board.

Conclusions

Based on the findings related to the critical analysis of methodology of the studies and the literature review related to police responses to mental health, the following conclusions were drawn.

Topical Analysis

1. The co-responding programs and further education for policing and mental health are more effective and more beneficial to the public as well as the professionals involved.
2. Many police officers without specialized training or having prior knowledge around mental health often felt unprepared when dealing with individuals experiencing a mental health crisis.
3. Police officers who have undergone specialized training had better outcomes when it came to reducing the number of arrests and increasing the number of referrals to mental health programs.
4. Mobile crisis teams or co-responding models were beneficial in creating a better sense of safety for individuals experiencing mental health issues, successfully deescalating situations by trained professionals, and being connected to outside programs.
5. The literature review shows that there was a lack of research focusing on the direct impacts of these co-responding models specifically on Black, Indigenous,

and other people of color (BIPOC) or other minorities who are experiencing mental distress.

6. When police officers are not aware of how their own mental health or burnout is impacting their responses, or when they are responding to calls without a trauma-informed approach, there is a risk of traumatizing the civilians they are responding to.
7. Police officers experience an increased amount of stress, emotional exhaustion, sleep disturbances, and problems with interpersonal relationships due to being a first responder which could lead to vicarious or secondary trauma (Greinacher et al., 2019).

Methodological Conclusions

1. The research paradigms and methodologies of the chosen ten studies are suitable to collect data and to explore the topic of police responses to mental health.
2. Surveys, interviews, and observational data from police ride-alongs to inquire about the barriers that police officers face in responding to individuals undergoing a mental health crisis are appropriate qualitative methods used by the researchers.
3. Quantitative methods such as coding information from police databases and questionnaires are useful.
4. Cause and effect cannot be established based on the nature of the studies because it may be unethical to create experimental conditions of mental health crisis.
5. Correlational and descriptive research methods are found to be useful to explore police responses to mental health.

6. Researchers who have social work or behavioral psychology backgrounds can be more effective in understanding the impacts that policing has on officers themselves and their mental health, as well as the individuals they are responding to.
7. Recruitment of participants in the studies involved used data from pre-existing databases, and from new recruits or officers working in the field. Seeing as the studies are addressing impacts of police responses to mental health, it would have been informative to hear from the perspectives of individuals involved in these calls and if they recognized any differences from officers who have had specialized training or were part of a co-response team. It would have also been informative to see more information regarding police training programs and the recruitment process for police officers.
8. Some of the sampling methods such as random sampling with a larger sample are helpful to establish the generalizability of the findings while the smaller samples and non-random sampling methods are less efficient to establish generalizability.

Recommendations

Clinical and Therapeutic Levels

1. In the research done by Hakik and Langlois (2020) it was highlighted that the final report of *the Standing Senate Committee on National Security and Defence* as well as the *Task Force on Governance and Change in the RCMP* expressed the need for police organizations in Canada to undergo a “cultural transformation” in order to address systemic barriers, as well as the importance of top down training including managers, supervisors, and officers in order for there to be acceptance

and change in acknowledging mental health. Jetelina et al. (2020) suggests an outside agency of mental health care providers screening for mental illnesses in the police academy and then on an annual basis in order to normalize the habit of mental health check-ups.

2. There was no information involved in these studies that spoke on vicarious trauma and how specialized training for officers or access to these co-responding programs could also provide basic education on mental health and inform officers about the impacts of vicarious trauma and how to address it. This could help reduce the stigma surrounding mental health in general as well in the systems at large. It would also be beneficial for further research on how mental illness or police officer burnout could impact the care or actions when responding to calls.
3. In order to properly educate police officers or other staff members that may be part of co-response teams, we need to ensure there are professionals and training programs that take into consideration the stressors of policing and the systems they work under, as well as the needs of the individuals they are serving. A gap in services appears to be a significant barrier, so if there were proper programs in place or supports to refer people to, I believe that would improve the care and the responses that police could offer.
4. Because of the stigma that was indicated throughout numerous studies, it is also important to have mental health supports for officers that is completely confidential and works towards fighting the stigma. Treatment could include anger management, coping strategies, grief and loss, suicide awareness, substance

abuse resources, family and relationships, and treatment focusing on depression, anxiety, trauma, and PTSD.

5. Vetting mental health in new recruits before training them to be police officers could be beneficial as well. Are they screened for mental illnesses? Are they provided information on how to recognize where their mental health is at for themselves or their teams? Do they know if support is provided and how to access it? Are they provided any education regarding trauma informed care or identifying if someone is in mental health distress? Answering these questions and acknowledging them in the research would provide much more depth to tackle the barriers that officers continue to face when responding to mental health calls.
6. After analyzing the results of this study as the researcher I would recommend implementing specialized training programs regarding mental health and diversity to police officers in order to increase the number of referrals to appropriate programs as well as decrease the risk for police violence.

Future Research

1. I would recommend research with larger, randomized sample sizes, as well as further research that focuses on the individuals with mental illness and their perceptions on the mental health and policing systems. I believe research that listens to the voices of those impacted most would be most beneficial as they could provide solutions that have proven to be helpful for them.
2. Furthermore, I believe that further research focusing on practical solutions in addressing the stigma around mental health and increasing mental health supports.

This could help highlight the need for more funding for programs and the benefits of freeing up the criminal justice system as well as protecting the people who need it most.

3. Lastly, throughout this study I have highlighted flaws that could be further studied so that the information is clear and conclusive. Doing so would improve the quality of the research and further examine the implications of police responses and ways to implement more beneficial responses

References

Aaro, D. (2020, February 11). *What is 'stop and frisk'? Controversial policing technique explained*. Fox News. https://www.foxnews.com/us/what-is-stop-and-frisk

Andreatta, D. (2013). *Another fatal shooting on an empty Toronto bus, 16 years earlier*. *The* Globe and Mail. https://www.theglobeandmail.com/news/toronto/another-fatal-shooting-on-an-empty-toronto-bus-16-years-earlier/article13494159/

Ankony, R. (1999). The impact of perceived alienation on police officers' sense of mastery and subsequent motivation for proactive enforcement. *Policing: An International Journal of Police Strategies and Management, 22(*2), 120-132. https://www.robertankony.com/publications/impact-perceived

Appelbaum, P. (2015). Can the Americans with Disabilities Act reduce the death toll from police encounters with persons with mental illness? *Psychiatric Services, (66)*10, 1012-1014. https://doi.org/10.1176/appi.ps.661005

Austin P. C. (2011). An introduction to propensity score methods for reducing the effects of confounding in observational studies. *Multivariate behavioral research*, *46*(3), 399–424. https://doi.org/10.1080/00273171.2011.568786

Bailey, K., Lowder, E.G., Rising, S., & Bradley, R.R. (2021). Evaluation of a police-mental health co-response team relative to traditional police response in Indianapolis. *Psychiatric Services, 73,* 366-373. https://doi.org/10.1176/appi.ps.202000864

Bailey, K., Staci, R. P., Ray, B. R., Grommon, E., Lowder, E. M., & Sightes, E. (2018). Barriers and facilitators to implementing an urban co-responding police-mental health team. *Health & Justice, 6*(1), 1-12. http://dx.doi.org.proxy.cityu.edu/10.1186/s40352-018-0079-0

Balko, R. (2020). *There's overwhelming evidence that the criminal justice system is racist. Here's the proof*. The Washington Post, https://www.washingtonpost.com/graphics/2020/opinions/systemic-racism-police-evidence-criminal-justice-system/

Bikos, L. J. (2021). "It's all window dressing:" Canadian police officers' perceptions of mental health stigma in their workplace. *Policing, 44*(1), 63-76. https://doi.org/10.1108/PIJPSM-07-2020-0126

Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment* (2nd ed.). Basic Books. (Original work published 1969)

Borum, R., Deane, M. W., Steadman, H. J., Morrissey, J., Borum, R., Deane, M. W., Steadman, H. J., & Morrissey, J. (1998). Police perspectives on responding to mentally ill people in crisis: perceptions of program effectiveness. *Behavioral Sciences & The Law, 16(*4), 393–405. https://doi-org.proxy.cityu.edu/10.1002/(SICI)1099-0798(199823)16:4<393::AID-BSL317>3.0.CO;2-4

Brister, T. (2018). *Navigating a mental health crisis: A NAMI resource guide for those experiencing a mental health emergency*. The National Alliance on Mental Illness. http://www.namifingerlakes.org/wp-content/uploads/2018/05/Navigating-A-Mental-Health-Crisis.pdf

Canada, K. E., Angell, B., & Watson, A. C. (2012). Intervening at the entry point: Differences in how CIT trained and non-CIT trained officers describe responding to mental health-related calls. *Community Mental Health Journal, 48*(6), 746-55. http://dx.doi.org.proxy.cityu.edu/10.1007/s10597-011-9430-9

Canadian Psychological Association. (2017). *Canadian code of ethics for psychologists* (4th ed.). https://cpa.ca/docs/File/Ethics/CPA_Code_2017_4thEd.pdf

Christian, J. B., Brouwer, E. S., Girman, C. J., Bennett, D., Davis, K. J., & Dreyer, N. A. (2020). Masking in pragmatic trials: Who, what, and when to blind. *Therapeutic innovation & regulatory science, 54*(2), 431–436. https://doi.org/10.1007/s43441-019-00073-7

City University of Seattle (2019). *Student Rights and Responsibilities*. Retrieved February 5, 2020, from https://cityu.smartcatalogiq.com/2019-2020/Catalog/Student-Rights-and-Responsibilities

Clayfield, J. C., Fletcher, K. E., & Grudzinskas, A. Jr. (2011). Development and validation of the mental health attitude survey for police. *Community Mental Health Journal, 47*(6), 742-51. http://dx.doi.org/10.1007/s10597-011-9384-y

Coleman, T., & Cotton, D. (2010). Police interactions with persons with a mental illness: Police learning in the environment of contemporary policing. *Mental Health and the Law Advisory Committee Mental Health Commission of Canada.* https://www.mentalhealthcommission.ca/wp-content/uploads/drupal/Law_Police_Interactions_Mental_Illness_Report_ENG_0_1.pdf

College of Alberta Psychologists. (2019). *Standards of practice*. Retrieved 16th October 2022, from http://cap.ab.ca/Portals/0/pdfs/StandardsOfPractice.pdf

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum, 1*(8). http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8

Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.

Davis, K. (2008). Intersectionality as buzzword. A sociology of science perspective on what makes a feminist theory successful. *Feminist Theory, 9*(1), 67–85. https://doi.org/10.1177/1464700108086364

DeVylder, J., Fedina, L., Link, B. (2020). Impact of police violence on mental health: A theoretical framework. *Am J Public Health*. *110*(11), 1704-1710. 10.2105/AJPH.2020.305874.

DeVylder, J. E., Hyun-Jin, J., Fedina, L., Coleman, D., Anglin, D., Cogburn, C., Link, B., & Barth, R. P. (2018). Association of exposure to police violence with prevalence of mental health symptoms among urban residents in the United States. *JAMA Network Open, 1*(7). https://doi.org/10.1001/jamanetworkopen.2018.4945

DeVylder, J., Lalane, M., & Fedina, L. (2019). The association between abusive policing and PTSD symptoms among U.S. police officers. *Journal of the Society for Social Work and Research. 10*(2), 261-273. https://doi.org/10.1086/703356

Falkenbach, D. M., Balash, J., Tsoukalas, M., Stern, S., & Lilienfeld, S. O. (2018). From theoretical to empirical: Considering reflections of psychopathy across the thin blue line. *Personality Disorders: Theory, Research, and Treatment, 9*(5), 420–428. https://doi.org/10.1037/per0000270

Ferrandino, J. A. (2014). An integrated theory for the practical application of "governance-based policing". *Policing*, *37*(1), 52-69. http://dx.doi.org/10.1108/PIJPSM-06-2012-0050

Feyissa, G., Woldie, M., Munn, Z., & Lockwood, C. (2019). Exploration of facilitators and

barriers to the implementation of a guideline to reduce HIV-related stigma and discrimination in the Ethiopian healthcare settings: A descriptive qualitative study. *PLoS One, 14(*5). doi:https://doi.org/10.1371/journal.pone.0216887

Fladen, J. (2021). *CIT is foundational (and we need co-response too)*. Official Website of Pete Earley. https://www.peteearley.com/2021/01/29/crisis-intervention-team-training-vs-alternatives-without-police-which-is-better/

Geijsen, K., de Ruiter, C., & Kop, N. (2018). Identifying psychological vulnerabilities: Studies on police suspects' mental health issues and police officers' views. *Cogent Psychology, 5*(1). https://doi.org/10.1080/23311908.2018.1462133

Godfredson, J. W., Thomas, S. D., Ogloff, J. R., & Luebbers, S. (2011). Police perceptions of their encounters with individuals experiencing mental illness: A Victorian survey. *Australian & New Zealand Journal of Criminology*, *44*(2), 180–195. https://doi.org/10.1177/0004865811405138

Greinacher, A., Derezza-Greeven, C., Herzog, W., Nikendei, C. (2019). Secondary traumatization in first responders: A systematic review. *Eur J Psychotraumatol, 10*(1), 1562840. https://doi.org/10.1080/20008198.2018.1562840

Hakik, S., & Langlois, K. (2020). "To serve and protect their mental health": The effects of police occupational culture on police officers mental health. *Salus Journal, 8*(2), 117–151. https://web.p.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=0&sid=f0f44900-f416-470d-8454-ff6f4d14eb0f%40redis

Haynes, Kathryn. (2012). Reflexivity in qualitative research. *Qualitative Organizational Research: Core Methods and Current Challenges*. 72-89. https://www.researchgate.net/publication/286352842_Reflexivity_in_qualitative_research

Horspool, K., Drabble, S. J., & OCathain, A. (2016). Implementing street triage: A qualitative study of collaboration between police and mental health services. *BMC Psychiatry, 16*. http://dx.doi.org.proxy.cityu.edu/10.1186/s12888-016-1026-z

Jetelina, K. K., Molsberry, R. J., Gonzalez, J. R., Beauchamp, A. M., & Hall, T. (2020). Prevalence of Mental Illness and Mental Health Care Use Among Police Officers. *JAMA Network Open*, *3*(10). https://doi.org/10.1001/jamanetworkopen.2020.19658

Johnson, S. (2019). *Attachment theory in practice : Emotionally focused therapy (EFT) with individuals, couples, and families*. The Guilford Press. https://doi.org/10.4324/9781351168366

Kisely, S., Campbell, L. A., Peddle, S., Hare, S., Pyche, M., Spicer, D., & Moore, B. (2010). A controlled before-and-after evaluation of a mobile crisis partnership between mental health and police services in Nova Scotia. *The Canadian Journal of Psychiatry*, *55*(10), 662–668. https://doi.org/10.1177/070674371005501005

Lancaster, A. (2016). Evidence for joint police and mental health responses for people in mental health crisis. *Mental Health Practice (2014+), 19*(10), 20. http://dx.doi.org.proxy.cityu.edu/10.7748/mhp.2016.e1067

Lane, R. (2019). “I’m a police officer not a social worker or mental health nurse”: Online discourses of exclusion and resistance regarding mental health-related police work. *Journal of Community & Applied Social Psychology, 29*(5), 429–442. https://doi.org/10.1002/casp.2410

Lathan, E., Langhinrichsen, R. J., Duncan, J., & Stefurak, J. “Tres.” (2019). The promise initiative: Promoting a trauma-informed police response to sexual assault in a mid-size Southern community. *Journal of Community Psychology*, *47*(7), 1733–1749. https://doi.org/10.1002/jcop.22223

Livingston, D. (2016). Contact between police and people with mental disorders: A review of rates. *Psychiatric Services, 67*(8), 850-857. https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201500312

Mahbubani, R. & McLaughlin, K. (2020). *Police officers stigmatize seeking help for mental-health issues. It could be damaging for the communities they’re supposed to serve and protect*. Insider. https://www.insider.com/police-officers-stress-mental-health-stigma-impacting-public-2020-6

Merriam-Webster. (2022). *Preventative*. The Merriam-Webster.Com Dictionary. Retrieved July 9, 2022, from https://www.merriam-webster.com/dictionary/preventative

Mikesell, R., Lusterman, D., and McDaniel, S. (1995). *Integrating family therapy: Handbook of family psychology and systems theory*. American Psychological Association. http://dx.doi.org/10.1037/10172-000

Moravec, E. (2019, September 5). *Do algorithms have a place in policing? How a Pakistani-born retired pilot took on a controversial, data-driven policing program in Los Angeles – and won*. The Atlantic. https://www.theatlantic.com/politics/archive/2019/09/do-algorithms-have-place-policing/596851/

Morgan, M., & Miles-Johnson, T. (2022). Responding to persons with mental illness (PWMI): Police recruit perceptions of mental health response training and engagement. *Cogent Social Sciences.* 10.1080/23311886.2021.2020469

National Alliance on Mental Illness. (2022). *Law enforcement.* https://www.nami.org/Advocacy/Crisis-Intervention/Law-Enforcement

Novich, M., & Hunt, G. (2017). "'Get off me"': Perceptions of disrespectful police behaviour among ethnic minority youth gang members. *Drugs: Education, Prevention & Policy, 24*(3), 248–255. https://doi.org/10.1080/09687637.2016.1239697

Ober, H. (2020). *Experiencing police violence worsens mental health in distinct ways: Unique effects of police violence create a public health crisis for communities most affected*. UCR News. https://news.ucr.edu/articles/2020/10/13/experiencing-police-violence-worsens-mental-health-distinct-ways

Oh H., DeVylder J., & Hunt G. (2017). Effect of police training and accountability on the mental health of African American adults. *Am J Public Health, 107*(10), 1588-1590. 10.2105/AJPH.2017.304012. PMID: 28902547; PMCID: PMC5607688.

Oliphant, R. (2016). *Healthy minds, safe communities: Supporting our public safety officers through a national strategy for operational stress injuries*. Report of the Standing Committee on Public Safety and National Security. publications.gc.ca/pub?id=9.825367&sl=0

Olofsson, A., Zinn, J. O., Griffin, G., Nygren, K. G., Cebulla, A., & Hannah-Moffat, K. (2014). The mutual constitution of risk and inequalities: intersectional risk theory. *Health, Risk & Society, 16*(5), 417–430. https://doi.org/10.1080/13698575.2014.942258

Poteat, T. (2021). Navigating the storm: How to apply intersectionality to public health in times of crisis. *American Journal of Public Health, 111*(1), 91-92. https://www.proquest.com/docview/2481240043?pq-origsite=summon

Proactive Policing. (2022, March 18). In *Wikipedia*. https://en.wikipedia.org/wiki/Proactive_policing

Puntis, S., Perfect, D., Kirubarajan, A., Bolton, S., Davies, F., Hayes, A., . . . Molodynski, A. (2018). A systematic review of co-responder models of police mental health 'street' triage. *BMC Psychiatry, 18*. http://dx.doi.org.proxy.cityu.edu/10.1186/s12888-018-1836-2

Richards, D. A., & Schat, A. C. H. (2011). Attachment at (not to) work: Applying attachment theory to explain individual behavior in organizations. *Journal of Applied Psychology, 96*(1), 169-182. http://dx.doi.org/10.1037/a0020372

Saez, F. (n.d.). *Be proactive*. Facile Things Blog. Retrieved from https://facilethings.com/blog/en/proactivity

Sarki, Z. & Saat, G. (2020). Adaptability traits and perception of forensic science among Investigating Police Officers (IPOs) in Nigeria. *Salus Journal, 8,* 75-92. https://www.researchgate.net/publication/340309924_Adaptability_Traits_and_Perception_of_Forensic_Science_among_Investigating_Police_Officers_IPOs_in_Nigeria

Scantlebury, A., A. P., Booth, A., McDaid, C., & Mitchell, N. (2018). Implementing mental health training programmes for non-mental health trained professionals: A qualitative synthesis. *PLoS One, 13*(6). http://dx.doi.org.proxy.cityu.edu/10.1371/journal.pone.0199746

Scantlebury, A., Fairhurst, C., Booth, A., McDaid, C., Moran, N., Parker, A., . . . Hewitt, C. (2017). Effectiveness of a training program for police officers who come into contact with people with mental health problems: A pragmatic randomised controlled trial. *PLoS One, 12*(9). http://dx.doi.org.proxy.cityu.edu/10.1371/journal.pone.0184377

Shapiro, G. K., Cusi, A., Kirst, M., O'campo, P., Nakhost, A., & Stergiopoulos, V. (2015). Co-responding police-mental health programs: A review. *Administration and Policy in Mental Health and Mental Health Services Research, 42*(5), 606-620. http://dx.doi.org.proxy.cityu.edu/10.1007/s10488-014-0594-9

Shan, G., & Gerstenberger, S. (2017). Fisher's exact approach for post hoc analysis of a chi-squared test. *PloS one, 12*(12), e0188709. https://doi.org/10.1371/journal.pone.0188709

Sherwood, L., Hegarty, S., Vallières, F., Hyland, P., Murphy, J., Fitzgerald, G., & Reid, T. (2019). Identifying the key risk factors for adverse psychological outcomes among police officers: A systematic literature review. *Journal of Traumatic Stress, 32*(5), 688–700. https://doi.org/10.1002/jts.22431

Smith Lee, J. R., & Robinson, M. A. (2019). "That's my number one fear in life. It's the police": Examining young Black men's exposures to trauma and loss resulting from police violence and police killings. *Journal of Black Psychology, 45*(3), 143–184. https://doi.org/10.1177/0095798419865152

Steadman, H., Deane, M., Borum, R., and Morrissey, J. (2000). Comparing outcomes of major models of police responses to mental health emergencies. *Psychiatric Services, 51,* 645-9. 10.1176/appi.ps.51.5.645.

Talavera-Velasco, B., Luceño-Moreno, L., Martín-García, J., & García-Albuerne, Y. (2018). Psychosocial risk factors, burnout and hardy personality as variables associated with mental health in police officers. *Frontiers in psychology, 9,* 1478. https://doi.org/10.3389/fpsyg.2018.01478

Teller, J., Munetz, M., Gil, K., & Ritter, C. (2006). Crisis intervention team training for police officers responding to mental disturbance calls. *Psychiatric Services*. *57,* 232-7. 10.1176/appi.ps.57.2.232.

Truscott, D. (2013). *Ethics for the practice of psychology in Canada* (rev. and expanded ed.). [Kindle Edition]. University of Alberta Press.

Urquhart, C., Lehmann, H., & Myers, M. D. (2010). Putting the 'theory' back into grounded theory: guidelines for grounded theory studies in information systems. *Information Systems Journal, 20*(4), 357–381. https://doi.org/10.1111/j.1365-2575.2009.00328.x

Vanclay, F., Baines, J. T., & Taylor, N. (2013). Principles for ethical research involving humans: Ethical professional practice in impact assessment Part I. *Impact Assessment and Project Appraisal, 31*(4), 243-253. https://doi.org/10.1080/14615517.2013.850307

van den Brink, R., Broer, J., Tholen, A., Winthorst, W., Visser, E., & Wiersma, D. (2012). Role of policing in linking individuals experiencing mental health crises with mental health services. BMC Psychiatry, 12:171. http://www.biomedcentral.com/1471-244X/12/171

Wainberg, M. L., Scorza, P., Shultz, J. M., Liat, H., Mootz, J. J., Johnson, K. A., Yuval, N., Bradford, J. E., Oquendo, M. A., & Arbuckle, M. R. (2017). Challenges and opportunities in global mental health: a research-to-practice perspective. *Current Psychiatry Reports, 19*(5). https://doi.org/10.1007/s11920-017-0780-z

Walker, S. (2012). *Effective social work with children, young people and families: Putting systems theory into practice*. SAGE Publications Ltd. https://dx.doi.org/10.4135/9781446270141

Watson, A. C., Corrigan, P. W., & Ottati, V. (2004). Police responses to persons with mental illness: Does the label matter? *Journal of the American Academy of Psychiatry and the Law, 32*(4), 378–385.

Westervelt, E. (2020, September 18). *Mental health and police violence: How crisis intervention teams are failing.* NPR. https://www.npr.org/2020/09/18/913229469/mental-health-and-police-violence-how-crisis-intervention-teams-are-failing

Westervelt, E. & Baker, L. (2020, February 25). *America's mental health crisis hidden behind bars.* NPR. https://www.npr.org/2020/02/25/805469776/americas-mental-health-crisis-hidden-behind-bars

Williams, C. (2007). Research Methods. *Journal of Business & Economics Research (JBER), 5*(3). https://doi.org/10.19030/jber.v5i3.2532

Wilson, C., & Aguilar, B. (2020, June 22). *Family of 62-year-old man fatally shot by police in*

Mississauga, Ont. Calls for public inquiry. CTV News. Retrieved from https://toronto.ctvnews.ca/family-of-62-year-old-man-fatally-shot-by-police-in-mississauga-ont-calls-for-public-inquiry-1.4993369

Wood, J. D., Watson, A. C., & Fulambarker, A. J. (2017). The "gray zone" of police work during mental health encounters: Findings from an observational study in Chicago. *Police Quarterly, 20*(1), 81–105. https://doi.org/10.1177/1098611116658875

Yang, S., Gill, C., Kanewske, C., & Thompson, P. (2018). Exploring police response to mental health calls in a nonurban area: A case study of Roanoke County, Virgina, *Victims & Offenders, 13(*8), 1132-1152. http://10.1080/15564886.2018.1512540

Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, *48*(2), 311–325.

YW Boston (2017, March 29). *What is intersectionality, and what does it have to do with me?* https://www.ywboston.org/2017/03/what-is-intersectionality-and-what-does-it-have-to-do-with-me/

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