Why some homicide investigations go cold: A study exploring the views and experiences of the investigative review process by UK detectives.

Introduction

In the United Kingdom, the Senior Investigating Officer (SIO) is responsible for the management, oversight, and progression of serious, and sometimes complex, investigations, including homicide (Major Crime Investigation Manual [MCIM], 2021). Research has identified that an effective SIO should be able to bring their inquiries to a successful conclusion while reducing the possibility of decision-making errors and biases (Innes, 2003; Rossmo, 2008). However, the impact of time pressures, external demands, and the availability of resources often creates challenges in not only resolving the case, but also in managing the direction it takes (Ask et al., 2011). Rossmo (2008) and Wright (2013) have identified a crucial component of investigative decision-making to be the generation of hypotheses, to both facilitate and progress criminal investigations, and to ensure that all pertinent and available information is appropriately collected. The ability to generate hypotheses and effective lines of inquiry is, however, only as good as an SIO's ability to manage and interpret the information received (Ask & Alison, 2010).

Historically, management by SIOs of information, decision-making activities, and their associated results has been subject to much criticism, exemplified by major public inquiries into problematic criminal investigations, such as the Byford (1981) examination of the Yorkshire Ripper investigation and the MacPherson Report (1999) into the handling of the investigation of the racially motivated murder of Stephen Lawrence (Nicol et al., 2003; Rossmo, 2008; Roycroft, 2009). Some cases that have resulted in miscarriages of justice (e.g., Stephen Kiszko) or delayed conclusions (e.g., Stephen Lawrence) are high-profile, primarily owing to the external inquiries conducted to examine their failings. Yet not all cases which may be attributed to faulty decision-making are captured or subsequently reach a successful outcome through the identification, charging, and prosecution of the person(s) responsible. Homicide cases with unsatisfactory investigative outcomes, such as the examples given above, are often (and arguably insensitively) referred to as "cold cases" and may attract criticism of the police and wider criminal justice system in the UK, as they remain unsolved or "undetected".

Research focusing on why some cases turn "cold" remains, at best, scant, with that which does exist often examining how decision-making errors are either (a) prevented through the live homicide review processes, or (b) how errors are identified during a cold case review of undetected cases. This present paper focuses directly on the investigative review process mandatorily conducted by UK homicide investigators as part of live, ongoing investigations, at the 7- and 28-day points of the live inquiry. The review process is designed to identify and capture any decision-making errors to keep the investigation "on-track" for a successful conclusion/outcome and minimise the chances of it

becoming designated as "cold" and becomes the responsibility of a cold case officer/team. The accepted duration of time for a case to be considered "cold" in UK policing is two-years (Allsop, 2018). This present paper focuses directly on the investigative review process mandatorily conducted by UK homicide investigators as part of live, ongoing investigations, at the 7- and 28-day points. The review process is designed to identify and capture any decision-making errors to keep the investigation "on-track" for a successful conclusion/outcome and minimise the chances of it being designated as "cold". The accepted duration of time for a case to be considered "cold" within UK policing is two-years, at which point the case becomes the responsibility of a cold case officer/team (Allsop, 2018). This paper studies the views and experiences of a sample of UK homicide investigators regarding the use and efficacy of the 7- and 28-day review points, and the impact these can have on subsequent cold case investigations. The sample of UK detectives are primarily assigned to cold case inquiries but continue to assist with live homicide investigations.

Decision-Making in Homicide Inquiries

Decision-making is complex for homicide detectives owing to the case's severity and public concern, the possibility of multiple interpretations of the event, numerous individuals being involved in some way, and the consequence of cases not being resolved (Brookman & Innes, 2013; Innes, 2003; Rossmo, 2008). Detectives must navigate this complex environment while making decisions in chaotic and quickly changing environments (Rossmo, 2019; Roycroft & Roach, 2019). There is a need for detectives to quickly ascertain what information is to be sought first (typically adhering to the fast-track actions, see MCIM, 2021), before analysing and prioritising the data to generate investigative hypotheses and case progression opportunities (Crego & Alison, 2004; O'Neill, 2018; Rossmo, 2008; Wright, 2013). Hypotheses generation is an important facet of an SIO's skill set, and so several tools, mechanisms, and procedural guides exist to support this activity. These can be understood through Rossmo's (2008; 2009) classification of formal, informal, and self-regulatory knowledge.

Formal knowledge refers to the training and education programmes for becoming a detective and SIO (Rossmo, 2014: Stelfox, 2008). In England and Wales, the Professionalising Investigations Programme (PIP) is a comprehensive course designed to train, develop, and hold accountable detectives responsible for all types of investigations (dependent upon PIP level one to four accreditation: O'Neill, 2018). Procedural guides are another form of formal knowledge whereby the steps required to complete an investigation are outlined, evidencing best practice accumulated over the years, and possible issues to avoid. For many years, UK homicide detectives were guided by the Murder Investigation Manual (MIM: ACPO, 2006), which was updated in 2021 and replaced with the MCIM. The guide contains similar information but has been updated to reflect investigative practice and legislative changes. The main purpose of both is essentially the same, to provide procedural guidance (for example, collecting evidence and gathering intelligence) and to ensure consistency in

the investigative approach, but with little way of guidance regarding investigative decision-making (Roach, 2023).

The MCIM (2021) refers to the importance of decision-making by emphasising the need to "articulate and document the rationale behind each decision" (pg. 30). Dando and Ormerod (2017) discussed the importance of an SIO's decision-log, and the need to justify each decision throughout the inquiry. The NDM seeks to avoid errors and biases across all areas of police decision-making, and so consists of six stages which can help with effective and appropriate decisions (College of Policing, 2013). Although decisions relating to homicides and their investigations are supposed to be captured within the NDM, the model fails to sufficiently capture the complexity, severity, and high-profile status of these cases (O'Neill, 2018). Instead, the NDM and abovementioned procedural guides are applicable only to procedural decisions, rather than intuitive ones which are important for the generation of hypotheses. The same criticism is therefore levied at this model as it is as the MIM and MCIM, that it represents a decision-making process and not how to make decisions that have been levied at the NDM (e.g., see Roach, 2023).

The Core Investigative Doctrine (CD: ACPO, 2005) actively encourages detectives to consider a range of different hypotheses, narratives, and explanations for a homicide inquiry. Yet, as with the other procedural guides, the how to is not discussed. Instead, detectives are required to review their previous decisions, hypotheses, and cases to determine suitable avenues for case progression (O'Neill, 2018; Wright, 2013). One way in which detectives achieve this is through their use of informal knowledge. Informal knowledge is reminiscent of the craft paradigm (Irvine & Dunningham, 1993; O'Neill, 2018; Shpayer-Makov, 2011) where training, teaching, and investigative practices are shared among colleagues and passed through generations of detectives (Shpayer-Makov, 2011). Informal knowledge can allow detectives to move beyond only procedural decisions, which is necessary in complex, chaotic, and high-profile cases (Wright, 2013). Wright's (2013) cycle of cognition explains the creation of hypotheses and use of intuition; detectives begin by identifying and using contextual cues about the scene and victim to generate the hypotheses which help identify who was responsible and what happened. This hypothesis generation is facilitated by detective's creation and use of informal homicide "types" (see Innes, 2003) which is shared among peers for the different cases investigated throughout their career. These informal classifications give detectives an indication of what to attend to at the crime scene to generate hypotheses and inferences (Wright, 2013). These activities are further facilitated through the availability heuristic.

The availability heuristic allows detectives to recall positive and favourable cases which appear similar to the one they are tasked with now (Rossmo, 2008; Tversky & Kahneman, 2003). This heuristic is useful for detectives when tasked with complex cases but is only effective if the detective has plentiful experience to draw from: novice detectives not only struggle to recall applicable cases

and successful lines of inquiry, but also generating investigative hypotheses and inferences within their SIO log books (see Dando & Ormerod, 2017). This heuristic creates further problems in that it only allows detectives to recall positive experiences (Rossmo, 2008). Thus, there may be problems with avoiding unhelpful, distracting, or misleading lines of inquiry from previous cases if these are not sufficiently recalled when using the availability heuristic.

Further, there is a risk that the availability heuristic may unnecessarily sway the detective into either confirmation bias or tunnel vision. If detectives fail to capture contextual cues when responding to a homicide, or too quickly moving into a "deliberative" mindset (Gollwitzer et al., 1990), their searches for information can be limited, less creative, and not sufficient to generate suitable hypotheses. This is a similar issue for investigations when detectives move too quickly into the *suspect verification* stage of the case and identify and arrest a suspect (Fahsing & Ask, 2013; Stelfox & Pease, 2005). Thus, detectives may focus on searching for and using information which aligns with their chosen hypotheses and explanations (understood as tunnel vision: Findley & Scott, 2006), and disputing, ignoring, or dismissing contradictory evidence inconsistent with their preferred explanation/hypothesis, as consistent with confirmation bias (Rossmo, 2008; 2014). It can be problematic for detectives to move beyond these biases, but it is also difficult for them to recognise that their decisions, hypotheses, and associated actions are caused by these errors.

Jones and colleagues (2008) recognised that the similarities between confirmation bias and tunnel vision means that they can both be overcome with investigative thinking. This requires hypotheses to be continuously generated during the inquiry to explain the different scenarios that might exist and create sufficient narratives to prepare for a prosecution (Brookman et al., 2022; Jones, 2008; Jones et al., 2008). If detectives appropriately use contextual cues to generate hypotheses and attend to all information (aligned with their hypotheses or not), then their assessment of evidence and opportunities for case progression are strengthened (Wright, 2013). It is also necessary for detectives to be mindful of where biases may seep into an investigation, and the impact that this can have on a case's progression and chances of resolution. *Self-regulatory knowledge* requires detectives to continuously assess their own strengths, weaknesses, and performance to develop both professionally and for their cases (Rossmo, 2004). The review mechanisms existing to assess the performance and progress of homicides can also serve as a professional development tool for detectives to check their own knowledge, biases, and possible errors.

As investigative hypotheses are an integral part of the investigative process (Rossmo, 2008; Wright, 2013), investigators must be cognisant of the biases and errors which may seep into the inquiry. The lack of guidance within the MIM and MCIM do little to support the decision-making process, which can make it more challenging for investigators to think outside the box, reflect on the inquiry, and consider different hypotheses, explanations, and suspects. One method for ensuring quality within a

live investigation, and preventing "cold cases", is the live homicide review functions occurring at 7-and 28-days.

Homicide Reviews

In 1989, following the Byford (1981) report of the Yorkshire Ripper murders and the associated investigative failures, the Association of Chief Police Officers (ACPO) implemented a policy for all police forces to review any major crimes which remain unsolved after 28-days (Nicol et al., 2003). The MacPherson (1999) report expanded upon this by devising codes of practice for the reviews, mandating them to be open, transparent, and thorough with a suggestion for them to be conducted externally (Jones, 2008; Jones et al., 2008; MacPherson, 1999). In 1998, these recommendations were updated into the Major Incident Room Standard Administrative Procedures (MIRSAP) guide.

A further review process implemented was one to be done at the 7-day point (also referred to as the "golden-hour" review: Nicol et al., 2003). These reviews are performed early to ensure the SIO is supported, appropriate and effective lines of inquiry are developed, and the investigation is not being misdirected, with the Murder Investigation Manual (MIM, 2006) citing uncorroborated witness statements as one example. There has been no academic discussion or examination of the 7-day reviews, with only minimal practitioner reference (e.g., MCIM, 2021). Thus, the efficacy of such reviews is unknown, or whether they are still conducted given the early days of the inquiry. Indeed, some 28-day reviews are not performed because the earlier procedural guidance stipulates that these reviews can be delayed owing to operational demands (ACPO, 2006; Hill & O'Neill, 2019).

Nevertheless, 28-day reviews have been subject to more discussion and transparency perhaps owing to their clearer stipulation within policy as a more formal review process. The 28-day review mechanism seeks to support the SIO through a constructive examination of the case's progress to date, which is performed by an SIO from a different force (Hill & O'Neill, 2019; MacPherson, 1999; Nicol et al., 2003). The review seeks to fairly examine the work achieved so far, in accordance with national standards, and with consideration for their operational, personnel, and monetary demands (ACPO, 2006). This is not a reinvestigation, and so it does not seek to replicate or complete work on behalf of the SIO: instead, recommendations are made based on all information currently available to the SIO and areas where lines of inquiry could be pursued further, or new areas becoming the focus (Nicol et al., 2003). However, if reviews at 28-days are not performed as noted above, then the ability to assess the investigation's direction is limited and there may be difficulties in reducing the impact or occurrence of biases and errors which may explain a case becoming cold.

Atkin and Roach (2015) recognised the review function as being an attempt to include a quality assurance mechanism for homicide investigations, as well as being the opportunity to provide constructive feedback for SIOs to develop the case and prevent unsolved inquiries (ACPO, 2006; Jones, 2008; Jones et al., 2008). However, the 28-day review may take up to six weeks to complete

given the amount of information which has been generated in this period (Hill & O'Neill, 2019). This length of time may mean the SIO has moved onto other inquiries, or is otherwise unavailable, and so the ability to effectively act upon the information recommended during the review is unclear (Hill & O'Neill, 2019). Further, the main problems, or areas of weakness, identified within 28-day reviews remain consistent and pose problems for their efficacy. Nicol et al. (2003) discovered three main problems surrounding actions, tasks, or lines of inquiry where they were either not identified and pursued by the investigative team (but noted by the external reviewer), these were of detriment to the investigation, or there were issues with their quality rendering them ineffective. These are quite broad, and perhaps subjective, issues pertaining to actions pursued in the first 28-days and it may only be possible to identify those which breach the accepted practices outlined in the procedural guides. Further, the efficacy of the 28-day review for supporting the resolution of a homicide is unknown, or the impact that the results of the review may have on the cold case review process.

This present paper addresses this gap in knowledge through the exploration of cold case review officers' experiences and understandings of live review processes, and their impact on the subsequent cold case review. These UK detectives work both live and cold case homicide investigations and provide perspectives from both investigative activities to explore the review processes' efficacy and how they may explain why some cases go cold.

Methods

The data presented in this study was obtained through a seven-month observation period with a two-force collaborative cold case unit in the North of England, and semi-structured interviews with 11 UK investigators responsible for the reviews of cold case homicides.

Observations of the working practices of the personnel responsible for cold case reviews was important owing to the lack of literature surrounding this investigative activity. Therefore, observations provide context and description to the work of the review officers, focusing on their approaches and views of the management, prioritisation, and investigation of cold cases (Dubin, 1976). The observations also ensured that the interview schedule was reflective and appropriate for the study's purpose. The non-participatory role was chosen so there was exposure to the phenomenon, but no involvement in the activities which provides separation between the researcher and area of inquiry (Denzin, 1989; Flick, 2018; Schensul et al., 1999). To be applicable for the observation period, the unit must be primarily assigned to cold cases, and a mix of both rural and metropolitan forces to explore any variances in practice among forces with different crime levels and review functions (e.g., one officer or a team of reviewers). Recruitment of forces for observations was difficult so convenience sampling became the method for securing access and participants.

The observations with Forces C and D centred around the phases of observation identified by Flick (2018). The first three months of the observations were focused on the specific cases under review at the time, which was quite descriptive but the preferred way in which the review officers updated their colleagues and recorded progress. The observations became more focused and selective (Flick, 2018) once context was obtained for the different cases, and the researcher had a better understanding of processes, policies, and practices surround the cold case reviews. The cases did provide a better understanding of the review process though. Towards the last month of the observation, Force D experienced a sharp uptick in live homicides, and the review officers were required to assist these investigations. Thus, they were increasingly unavailable for the observations. A further four weeks of observation were conducted, but saturation had been met.

Semi-structured interviews (SSIs) were designed to supplement the observation period by allowing more in-depth conversations about the review of cold cases, while following up on concepts identified from the observations (e.g., manner of working, preferred hypotheses). The interviews were conducted with all members of the observed cold case unit (N = 9), a recently retired officer from a metropolitan force (Force E: Henry), one review officer (Caroline) from a metropolitan force (Force B), and two members of a regional cold case team (Force A: Adam and Simon). The interviews ranged from 40 minutes to two and a half hours in length and allowed participants to follow the interview schedule while discussing any points they deemed important or relevant to the phenomenon.

The observations and SSIs were collectively analysed using an inductive approach to Thematic Analysis (Braun & Clarke, 2006). This approach allowed themes to emerge from the data, rather than adhering to a specific theoretical framework, and captures all participant's views (beyond the interview schedule). The six stages of Braun and Clarke's (2006) Thematic Analysis were followed, resulting in the identification of three stages to a cold case review (1. Preparing for the review: 2. Conducting the review; 3. Concluding the review), 12 main themes, and 25 sub-themes. For this study, the data from stage two was applicable and includes 4 main and 5 sub-themes of relevance.

Results

The participants within this study were experienced detectives, with vast knowledge of different homicide types (e.g., stranger, gang-related, child homicides). Some of the participants also had experience of leading inquiries as an SIO. Thus, they approach the review of cold cases with a catalogue of best practice, example cases to draw upon, and experience with difficult-to-resolve cases. Thus, some of the early conversations with the participants during interview were focused on their knowledge and experience of the live review processes that they have been involved in, or performed.

Well, we used to do an initial quick, short, and sharp review after a week, the seven days, and then the 28-days if it remained undetected. Then, obviously a major review after that if needed (Nick, Force D).

Nick conducts investigations and reviews of both live and cold cases and recognises these are ongoing systems within homicide investigations to prevent them becoming cold inquiries. While he did not specifically identify the efficacy of these reviews, he did introduce the concept of a "major" review, which aligns with Steven's discussions of a 56-day review, which is not discussed within the available procedural guides (MIM, MCIM).

And then it's reviewed at the 56-day stage and if it's not resolved by then, then you're looking at it becoming a cold case because there's just nothing for you to go on (Steven, Force C).

Steven recognised that the 56-day review is a further quality assurance mechanism, which ensures all recommendations from the previous reviews (7- and 28-day) are progressed and exhausted. Steven indicated that should a 56-day review be required, it is unlikely that the case will be resolved while deemed a live inquiry. It is unclear what investigative activities and efforts are performed during the 674-day gap between a 56-day review and the two-year review which withdraws investigative resources and renders the case cold (Allsop, 2018). Further, Hill and O'Neill's (2019) exploration of 28-day reviews with the Metropolitan Police Service (MPS) found these can take six weeks to complete, so the purpose and efficacy of the 56-day review is questionable.

It is important to recognise, however, that only Steven discussed this review mechanism within his interview: thus, the use of a further "major" review after 28-days in all forces across England and Wales is unknown, particularly given its lack of reference within either the MIM or MCIM. As with Nick's comments, it is unclear how helpful the 56-day review would be for preventing cold cases. Caroline (Force B) also mentioned internal reviews by the Force Review Officer (discussed in the MCIM, 2021) after the 28-day review. She did not discuss specific time frames, but recognised this was when resources were withdrawn from the case, meaning it is no longer considered "live". If adhering to Allsop's (2018) time boundaries, the review Caroline references is the one occurring at the two-year mark.

In nearly all the interviews, participants referred to a "closing report" which typically formed the beginning of their review for a cold case. The closing report is a document compiled by the SIO and those on the original investigating team, and provides details on the victim, the homicide circumstances, lines of inquiry pursued, and whether anything remains outstanding. The closing report is completed once the decision has been made to withdraw resources and render a case as cold.

That will contain, not only their version or hypotheses, or version, or where they think it should go, but it actually contains a lot of circumstantial evidence about what's really

happened. So, the first thing I look for in a review is any closing report, or briefing reports, to get my head around the circumstances of the job (Kyle, Force D).

Well, you do tend to look at the closing report, as it does, or should, give you a good summary of what the offence was all about (Nick, Force D).

The report allows the review officers to become acquainted with the case and identify what investigative efforts have already been pursued and to what end. The report can also guide detectives through the different documentation available (e.g., court reports, forensic evidence testing results). The order in which these documents are reviewed was different for each participant. However, as this was completed by the SIO, and not necessarily independently reviewed, the report may outline their biases, errors, or inappropriate hypotheses. While the 7- and 28-day review may have prevented these errors from further impacting the live investigation, it is unclear how they are prevented from seeping into the closing report document. Therefore, participants may not obtain an accurate representation of the case, its circumstances, lines of inquiry, and progression opportunities. Further complicating the use of this report is the lack of a standardised template allowing information deemed relevant or important for the SIO to be included. This can also lead to omissions of information, affecting the view obtained by the review officers.

An issue raised for both the cold case reviews, and live homicides, is the number of cases that personnel and/or teams are responsible for. The number of live cases pose problems for cold case review officers to work on their allocated cases because they are assigned to help with the ongoing, new inquiries. This was evidenced during the observation period, where the review officers were re-assigned to live homicides.

I mean if you take today for example [Force C], year to date has had 16 murders, it's unprecedented: never known anything like it. So, fortunately enough there was enough to solve each murder but if not, then the decision is made where it is pushed back (Steven, Force C).

So, we put it on the back burner, whilst you investigate the newest one and so on, and so on. It's like a circle, just keeps getting pushed and pushed back, and eventually it becomes a cold case, because you haven't got the time or the resources to give it anymore" (Steven, Force C).

The concern with large number of homicides is that not all of them might be solved quickly, and there may become a point in time where the decision must be made to allocate resources elsewhere. Although the decision is not made to withdraw investigative resources completely, there is a reduction in the amount of effort afforded to each case. As such, this may increase the likelihood of a case becoming cold. Continuing with the problems associated with live homicides

is Paul's belief that some cases are not sufficiently pushed to a resolution.

It may just be because you don't have that bit of luck but, normally, it's not just luck it is down to, I think, [but] pushing intelligence opportunities, and pushing arrest opportunities... (Paul, Force D).

Paul raised concerns with the ability of detectives and particularly SIOs to push their cases to a resolution with the information that they have already gathered. Paul went on to argue that "the biggest mistakes made are people who only go around several months later when they've got a nice ribbon on top of the case to go and nick somebody. But, in fact, if they did it quickly, they would have created further opportunities, e.g., searching, forensic opportunities etc." Paul further highlighted that "the biggest mistakes made are people who only go around several months later when they've got a nice ribbon on top of the case to go and nick somebody..."

Often detectives, according to Paul wish to gather the confirmatory evidence to prove the suspect(s) was responsible for the offence. However, in doing this, they appear to make it more difficult for themselves as they limit the information, evidence, and resources that could be made available for them. Further, by acknowledging these limitations, review officers can appreciate how efforts should be made to fill these gaps during the review of a cold case.

Paul is significantly experienced within his role, and had been involved in serious crime investigations, including managing them, for many years prior to joining the cold case unit. Whilst keen to continue pushing opportunities, this may relate more to the confidence of the detective rather than the opportunity being available to do so. If detectives are aware that pushing certain lines of inquiry would provide them with more opportunity, it may become more common practice. This is instead of waiting for the opportunity to be presented to them.

The decision-making of senior management, notably SIOs, can be an important influencing factor on a case's progress but it is not something that review officers can manage, or even always anticipate. It is still an internal factor as it is occurring within the organisation that the work is taking place within.

SIOs are the lead investigator. Each one is a human being which will have good and bad days. They may have conscious or unconscious biases. Methods that they prefer, comfort zones, or lazy thinking. So, their investigation might not always be as good as it could have been. If they are not alive to that, or the review process isn't and doesn't alert to it, like a second opinion in a medical diagnosis, then when they have run out of ideas, it becomes a cold case. They've ran out of ideas. There was no system to say "well, let someone else have a look at

it" (Henry, Force E).

Henry emphasised the importance of the review processes that have been implemented for live homicides, including the informal 7-day and formal 28-day reviews (ACPO, 2005). However, he also indicated that the review processes may not sufficiently identify or capture the biases, decision-making factors or influences that can affect those in charge of the inquiry. The position of the SIO does pose concerns for the progression of a live homicide where their biases or thinking errors may hinder the entirety of the inquiry. Further, these errors and biases might impact on the chances of a case becoming an unsolved inquiry.

SIOs were not to be questioned in some of the older jobs, you know, and whatever they said went and you think "well why didn't they go down this route?" Well, because the SIO had a certain viewpoint in those sorts of days and that's how it goes, particularly from jobs in the 60s and 70s (Kevin, Force C).

Kevin discussed the historic practices within investigations, whereby SIOs would not be challenged by their colleagues and notably by junior members of staff. Their opinion was deemed the only worth noting, and the remainder of the team would follow their lead. This is reminiscent of hierarchical issues that may have occurred within criminal investigations. It does mean though that some errors, biases, or tunnel-visioned thinking can exist within the inquiry, but they have not been sufficiently rooted out. In hindsight, when conducting the UH review now, it can become apparent as to where issues arose historically by the management team, and this may indicate why the case had become unsolved. As stated by Kevin, this is not reflective of current investigative practices and although SIOs remain in command of the investigation's direction, there is more opportunity for discussions of alternative perspectives.

I think nowadays we're more you'll be in a briefing for a major job and the SIO will quite gladly take views form the floor which wouldn't have happened [previously] (Kevin, Force C).

By accepting others' opinions within the investigation, which is more reflective of today's practices in homicide inquiries, group-thinking and the exchange of knowledge can occur which is beneficial for the investigation and its development. Any errors or problematic decisions can also be captured by others to keep the inquiry on track and ensuring that these do not hinder the case's progression opportunities.

Discussion

This paper sought to explore the efficacy of live homicide review mechanisms for identifying, preventing, and managing decision-making errors, biases, or faulty thinking through the perspective of cold case review officers. Guidance exists to support detectives and SIOs in their conduct during a homicide inquiry (e.g., ACPO, 2005, 2006; MCIM, 2021). These guides serve to develop procedural decisions (Wright, 2013), where the lines of inquiry can be quickly identified and pursued. Wright (2013) argued that procedural decisions are necessary in any investigation, but there is a need to move beyond these. Participants in this study recognised the utility of procedural guides and associated decisions, which also helped them in their reviews of cold cases. There are steps taken in any investigation, adhering to the fast-track and perhaps standard lines of inquiry, and allow the review officers to determine what information was pursued and to what extent. However, the participants were adamant that detectives needed to move beyond the procedural guides to "think outside the box" and use their intuition, experience, and skills to generate lines of inquiry and investigative hypotheses. This remains a gap in policy and practice, given the procedural guides lack of reference to this investigative activity (Roach, 2023). Generating investigative hypotheses and intuitive decisionmaking has been associated with the confidence of detectives (see Wright, 2013). Confidence allows the detective and SIOs to move beyond only that contained within the procedural guidance and can be created with exposure to and experience of different homicide types.

In their interviews, Jane and Matt spoke of confidence and the importance this has in developing and hopefully solved a homicide inquiry. Jane argued that detectives must move beyond viewing the procedural guidance as a tick-box exercise, otherwise their ability to push information and different narratives for the case and its presented circumstances may suffer. In turn, this can affect the case's chance of resolution. Similarly, Matt thought that aligning too closely to the procedural guidance may mean opportunities are missed, ignored, or delayed and there is limited scope or evidence of intuitive decision-making or hypotheses generation. While the Core Investigative Doctrine (ACPO, 2005) encourages detectives to consider different hypotheses, explanations, and narratives for the inquiry, it does not discuss how this can be achieved (see Roach, 2023). Instead, participants spoke of their skill set to generate this information but how this relied on their skills and experience of homicide inquiries.

Participants highlighted that some detectives, and perhaps those without as much experience or lacking in confidence may experience decision inertia (Brookman et al., 2019) and fail to push intelligence opportunities. This was noted as a concern in the MacPherson Report (1999) too and impacted upon case progression and resolution. While noted as a problem with novice detectives, where the focus is on collecting lots of information before hypotheses are generated or decisions to act are made (see Dando & Ormerod, 2017; Fahsing & Ask, 2016), opportunities for case progression

may be limited. These scenarios are problematic for both live and unsolved inquiries, where evidence may be missed, or follow-up work is not sufficiently undertaken (see Cronin et al., 2017; Wellford & Cornin, 1999 for discussion). It is also plausible that some investigations suffer because of the large number of homicides experienced by a force. When there are numerous cases to attend to, the detectives may be limited in their ability to generate investigative hypotheses and push intelligence opportunities. Several participants discussed this issue and recognised that some cases may have to be put onto the backburner because new cases have become their responsibility. Thus, these cases may only be reviewed or investigated when the opportunity arises for detectives. The live review mechanisms may allow opportunities to be identified by the external reviewers or highlight where information is lacking, and this may put the case back on track.

Only brief mention of the live review mechanisms was given by participants, but these centred mostly on their function which is to quality assure, support detectives, and identify areas of case development and progression (Atkin & Roach, 2015). They did, however, introduce the possibility of a 56-day review, which was thought to be the last opportunity to progress the case, and the last one before the case is deemed an unsolved inquiry. Steven mentioned this review as being an opportunity to follow-up on other actions or lines of inquiry deemed important and necessary from the earlier reviews (presumably the one at 28-days). The efficacy of this review function is unclear, and not subject to much discussion by participants. However, given that Hill and O'Neill (2019) reported an average time of six weeks to complete, renders the 56-day review unnecessary. There is insufficient time for recommendations to be passed to the live team, never mind executed by them to progress, and develop the case.

There is also a concern that not all unsolved inquiries will have benefited from the live review mechanism, as they were only introduced in 1989 (Nicol et al., 2003). Some cold cases may predate this period, and so they would rely on the review officers assigned to cold cases being competent to recognise if any errors or biases have occurred. As the participants in this study were highly experienced in investigating, and sometimes leading, homicide inquiries, they were confident in their abilities to review not only the live inquiry, but also the cold case. One way in which this is achieved is through the SIO's logbook, discussed by Henry in their interview and recognised in Dando and Ormerod's (2017) study. The SIO logbook allows the review officers to appreciate the circumstances of the homicide, issues with resources or the number of cases that they are responsible for, and the decisions made.

The participants did not explicitly state either confirmation bias or tunnel vision were evident within some cold cases, but they did emphasise how the SIO's narrative is paramount and sometimes hard to disagree with. Brookman et al. (2022) discussed the importance of narratives for building a case for prosecution, and this can also apply to pursuing lines of inquiry and achieving a case resolution. If a

faulty or incorrect narrative is not identified, it can lead to potentially wrongful convictions or UHs (Rossmo, 2008). Detectives assigned to cold cases would be required to identify if a faulty narrative or explanation was pursued incorrectly by the live investigating team, which could be facilitated through a review of the SIO's logbook. However, it may be difficult to disentangle these errors when the cold case reviewers use the SIO's closing report to orient to the cold case and use this as a basis for generating information and areas of progression. The closing report offers no separation of the SIO's views, hypotheses, and decisions because they are responsible for compiling the report. It may be more useful for cold case review officers to examine the case and its documents separately to form their own opinions, rather than risking the same errors occurring again.

The views of SIOs are paramount within the investigation, and they are responsible for the case's management, progression, and success (Irvine & Dunningham, 1993; MacPherson, 1999; Nicol et al., 2004). SIOs also make most of the decisions and feed this into the actions and activities of the rest of the team (O'Neill, 2014; Smith & Flanagan, 2000). Thus, a review of their logbook is important for reviewing the decisions made, and whether this may have created errors, hindered the collection of information, or delayed opportunities (e.g., arrests). The participants recognised that there may be issues with the SIOs and their views being prominent within the live inquiry, where only their hypotheses, opinions, and decisions feature. There is a risk that faulty thinking, errors, and biases are hindering the investigation but not being sufficiently rectified if the SIO does not consider other detective's views. The decision-making within live homicides may explain why cases have become unsolved.

Conclusion

This study focuses on the identification of errors, biases, and problematic decision-making through the lens of cold case detectives. These participants are responsible for the homicide once resources are withdrawn, and the case has not been successfully concluded. They use documentation created by the live homicide team to begin their review, but this lack of separation poses concerns with the efficacy of a cold case review when decision-making errors or problems have not been sufficiently identified and captured. Not all cold cases will be the result of faulty decision-making, and the advances in the live homicide review processes have sought to improve this process. There is a responsibility placed on cold case review officers though to identify and subsequently rectify any errors from the live inquiry. Yet, there is the possibility for some information to be lost to the inquiry forever if not suitably pursued during the live inquiry. However, more research is required to identify whether the live review mechanisms at either 7, 28- and possibly 56-days are effective and how successful they are in preventing cold cases from occurring.

This study has examined the views of cold case reviewers, and so further research is required to explore the views of SIOs responsible for live homicides and their experiences of the review process. Their views, engagement with, and experiences of live review processes, and their suitability for progressing cases should be examined to determine whether they are suitable for preventing cold cases. This would highlight where the review processes could be improved (e.g., time frames for completion as identified in Hill and O'Neill's 2019 study), how decision-making errors are identified and amended to progress the inquiry.

Some participants in this study recognised that there can be some challenges pertaining to the original investigation's decisions and a case subsequently becoming unsolved. As with Nicol et al.'s (2004) study, participants recognised decision-making errors on behalf of the SIO can be problematic for case progression. Several high-profile external inquiries have found faulty decision-making to be an area of concern for homicide investigations (Roycroft, 2009). While no studies have yet explored the impact of faulty decision-making and case progression, it is an important area for this study to provide information on why cases may have become unsolved, and if these earlier decisions hinder the chances of progressing an unsolved homicide.

References

ACPO (2005) Core Investigative Doctrine. NCPE.

ACPO. (2005). Major incident room standardised administrative procedures manual.

Association of Chief Police Officers

ACPO (2006) Murder Investigation Manual. NCPE.

Allsop, C. (2018). Cold Case Reviews: DNA, Detective Work and Unsolved Major Crimes. Oxford University Press.

Atkin, H. and Roach, J. (2015). Spot the difference: Comparing current and historic homicide investigations in the UK, *Journal of Cold Case Review, I*(1), 5-21.

Brookman, F., & Innes, M. (2013). The problem of success: What is a "good" homicide investigation? *Policing & Society, 23*(3), 292-310. https://doi.org/10.1080/10439463.2013.771538

Brookman, F., Maguire, E. R., & Maguire, M. (2019). What factors influence whether homicide cases are solved? Insights from Qualitative Research with Detectives in Great Britain and the United States. *Homicide Studies*, 23(2), 145-174. https://doi.org/10.1177/1088767918793678

- Cronin, J. M., Murphy, G. R., Spahr, L. L., Toliver, J. I., & Weger, R. E. (2007). *Promoting Effective Homicide Investigations*. US Department of Justice Office of Community Oriented Police Services.
- Fahsing, I. & Ask, K. (2016). The making of an expert detective: the role of experience in English and Norwegian police officers' investigative decision-making. *Psychology, Crime & Law,* 22(3), 203-223. http://dx.doi.org/10.1080/1068316X.2015.1077249
- Findley, K. A., & Scott, M. S. (2006). The Multiple Dimensions of Tunnel Vision in Criminal Cases. *Wisconsin Law Review*, 2, 291-397.
- Flick, U. (2018). An Introduction to Qualitative Research (6th Ed.). Sage.
- Hill, S., & O'Neill, M. (2019). Reviewing the Situation: Practitioner perspectives on the use and effectiveness of 28-day homicide reviews. *Journal of Criminological Research, Policy, and Practice, 5*(3), 215-228. https://doi.org/10.1109/JCRPP-04-2019-0029
- Innes, M., & Brookman, F. (2013). Helping police with their enquiries: international perspectives on homicide investigation. *Policing and Society, 23*(3), 285-291. https://doi.org/10.1080/10437463.2013.771542
- Irvine, B., & Dunnighan, C. (1993). *Human Factors in the Quality Control of CID Investigations*. Royal Commission on Criminal Justice Research Study No. 21. HMSO.
- Jones, D. (2008). *Reviewing the Reviewers: The review of homicides in the United Kingdom.* [Unpublished Masters Thesis]. University of Portsmouth.
- Jones, D., Grieve, J., & Milne, B. (2008). The Case to Review Murder Investigations. *Policing: A Journal of Policy and Practice*, 2(4), 470-480. https://doi.org/10.1093/police/pan053
- MacPherson, W. (1999). The Stephen Lawrence Inquiry: Report of an Inquiry by Sir William

 MacPherson of Cluny. HMSO.

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/277111/4262.pdf
- National Police Chiefs Council [NPCC] (2021). *Major Crime Investigation Manual* (MCIM, 2021). NPCC.
- Nicol, C., Innes, M., Gee, D., & Feist, A. (2004). Reviewing murder investigations: An analysis of progress reviews from six police forces. HMSO.

 https://www.politieacademie.nl/kennisenonderzoek/kennis/mediatheek/PDF/4106.pdf

O'Neill, M. (2018). Key Challenges in Criminal Investigation. Policy Press.

Roach, J. (2023). Practical Psychology for Policing. Bristol University Press.

Rossmo, D.K. (2008) (ed.) Criminal Investigative Failures. CRC Press.

Roycroft, M. (2009). Solving Factors and Decision-Making in 'Hard to Solve' Murder Enquiries. [Unpublished PhD Thesis]. University of Surrey.

Roycroft, M. (2019). *Good practice solving factors*. In M. Roycroft & J. Roach (Eds.). Decision Making in Police Enquiries and Critical Incidents. (pp. 35-46).

Wellford, C., & Cronin, J. (1999). An analysis of variables affecting the clearance of homicides: A multistate study. Justice Research and Statistics Association, Washington, DC.

Wright, M. (2013). Homicide Detectives' Intuition. *Journal of Investigative Psychology and Offender Profiling*, 10(2), 182-199. https://doi.org/10.1002/jip.1383