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Investigating Cognitive Bias: Does the status of a homicide or sexual offence investigation (live, cold or historic) effect the cognitive decision making of the investigating officer

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A thesis submitted to the University of Huddersfield in fulfilment of the requirements for the degree of Master of Science by Research (Human and Health)

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Abstract

There is vast amounts of research which investigates the decision making process of investigating officers in homicide investigations. Little is known about the decisions made whilst investigating sexual offences and little is known regarding whether these decisions differ if the officer is investigating a cold homicide/sexual offence or a historic homicide/sexual offence. The current research aims to bridge the gap in research regarding decision making and cognitive bias dependent of the status of the criminal case. It is not a comparison of offence type and was not concerned with exploring the differences between types of crimes.

Seven police investigators working on a cold case review team for one of the UK's police forces were interviewed regarding the decisions they make. The team is roughly split into two sides and the officers specifically investigate either homicide or sexual offences that have not been solved at the time interviews occurred. Although the officers provided mixed views, the research found that there is a difference between cold and historic homicide/sexual offence cases with a definition obtained. However, 'cold' as a terminology caused unsettlement with the officers. The research also found that cognitive bias and the framing effect do have an effect on the decisions made by investigators. However, the effect the frame has was different to what was originally hypothesised. Other impacting factors on decision making were also discovered and discussed. Implications on UK policing are considered and the limitations of this research are considered. Recommendations for further research are offered.

Prologue

The work that the police do I feel is always something the public are interested in. There are not many jobs that are heavily in the media and criticized more often than praised. Having worked in the policing organisation myself for 2 years, I felt it was important for the lay person to understand what these investigators are facing on a daily basis.

I also felt, having studied Psychology for 3 years, that as an organisation, they need to be more open and conscious about their own thought processes and what effect things could have on the decisions they make.

I have always had a great interest in police detection and if I could help officers be more confident in their investigative work by being aware of possible impacting factors, then this research is worthwhile.

I believe officers, especially in the current climate with government cuts, could benefit from more training and on-going training with more focus on cognition so they have an understanding of how their brains are processing information in order to make these difficult decisions during an investigation. If they are made aware of the possible biases, then it is more likely they will notice if their decisions become impacted.

Introduction of the Thesis

This current research aims to bridge the gap between existing research in regards to decision making in police homicide/sexual offence investigations and whether the decisions made, differ depending of the status of the case (live, cold or historic). Research of decision making with regards to homicides and sexual offences will be discussed separately and any differences that arise, will too be discussed however this was not a focus of this research. Due to the timeframe the research was conducted in, it would be difficult to draw comparisons against the offence type as well as the case status. Therefore, the working hypothesis for this research is that police investigators follow the same decision making process regardless to the offence type.

The existing research mainly focuses on live criminal investigations, with minimal research focused on cold case investigations and virtually no research at all focused on historic criminal investigations. It has proved difficult to source agreed definitions of what makes a live case, a cold case or a historic case. The following working definitions have been proposed for the purposes of the research with a view to provide firm definitions:

Case Type	Working Definition
Live	Involves identifying, collecting and using information/evidence in order to bring perpetrators to justice (Stelfox 2013).
Cold	Any case in which all investigative leads have been exhausted; a police inquiry that has been suspended with the crime still unsolved (Collins English Dictionary, 2018)
Historic	Historic crime is something which is “non-recent” however no time scale is suggested but the National Institute of Justice (2008) states “historic” is just another term for a “cold” outside the USA.

The current research has two main research aims with specific objectives within:

- 1) To explore decision making within the different case types (live, historic and cold).
 - Using the existing working definitions of the case types, the research will probe any differences in decision making in relation to the type of case (live, historic and cold).
 - To provide definitions using the views of individuals whom have an extensive policing background and have personal experience in investigating all three case types in their career.
- 2) To examine any cognitive bias across the different case types (live, historic and cold).
 - Analyse the types of bias that may affect decision making in an investigation and whether certain biases affect a certain type of case.

- Explore whether the prevalence of the framing effect varies by case type.
- Explore if the investigating officer have their decisions framed in relation to a cold case simply by knowing a competent detective couldn't solve previous to them suggesting they may accept defeat before even looking at the case.

Research Rationale

Answering the above research aims would benefit those individuals that investigate crime; at this moment in time, the investigative manuals available to the police force are focused on live investigations. This research will allow for more reliable investigation aids to be produced dependant on the type of case being investigated. Making officers aware of the possible biases which may specifically affect them dependent on what type of case they are working on, will assist them in recognising the potential negative and preventing it from affecting the case. In most recent years, due to the budget cuts that the police force has faced, there has been an increase in civilian criminal investigators in order to free up more police officers for the front line (Blue Line Jobs, 2019). Therefore having more specific investigative aids dependant on case type will guide the civilian criminal investigators more efficiently as they are less likely to have the extensive policing experience.

Content

Firstly, during the literature review, existing research in the area of decision making will be discussed which moves on to decision making within criminal investigations. Then focus will shift on to decision making and potential bias and finally this section will look at the types of criminal cases (live, cold and historic).

The methodology section describes how the research was conducted, starting from the initial physiological grounding, to the data collection technique, the interview guide that was used and the ethical considerations of the research. The section also discusses the sample and the sampling technique use, the interview processes and how the data will be analysed.

The discussions and findings section discusses each of the four themes found from analysing the data. Sub-themes within the main these are also discussed. The discussion section summaries each theme and goes on to explore the limitations, implications and recommendations of the research.

The conclusion section draws back on the research aims of the thesis and identifies whether the data collected did in fact provide answers in order to bridge the research gap.

Literature Review

A decision is defined as a person making a choice of either two, or more options based on the information that they have available to them at that time (Plous 1993). However, the decisions we make are very routine; it's unlikely if we make the wrong decision, a murderer could escape being sent to prison. This however, is an outcome that investigating officers must consider when making decisions during their day to day jobs. The decisions that police officers or staff make during their investigations, especially in homicide or sexual offence cases, can be extremely high stake. Atkin & Roach (2015) state that flaws within the decisions made are often only identified when something goes wrong; police incompetence or 'wrong' decisions are identified as being responsible for miscarriages of justice, for example the Stephen Lawrence Inquiry Report (1999) and Stefan Kiszko (1975). Getting it wrong can be catastrophic for everyone involved, especially the officer who made those decisions.

It's argued that decisions are either conscious or unconscious. A conscious decision tends to involve spending as long as it takes in order to come up with a solution. In some instances, this is an adequate method to make a decision. However, just because it takes a long time to make a decision doesn't necessarily mean it is going to result in a positive outcome. On the contrary, an unconscious decision is one that an individual makes at the time, which doesn't take much time at all (March, 1994). In a live homicide/sexual offence case, officers may not have the blessing of spending as much time as they need to before they make a decision. This is the same for cold case investigations too, it is therefore, more likely they make unconscious decisions. This would be referred as police 'intuition' which will be discussed later. Dijksterhuis (2004) conducted experimental research which aimed to investigate conscious and unconscious decisions. Participants were presented with a complex decision which had various outcomes. The conscious group were informed they must make a decision within a few minutes and the unconscious group were distracted for a few minutes and then told to make a decision. It was found that throughout the experiments, those in the unconscious experiments made the best decisions.

Section 1: Theories of decision making

There are many theories about how people make decisions. Lindley (1991) argues that looking at decision making logically, there is only one way to do it; this involves considering three principles. He states that we consider possibilities of uncertain events, consider possible consequences of our options and we choose the decision which has the best outcome. It is suggested that by making a decision based on these three principles, it will be a more sensible decision, reached by the most efficient process.

The attribution theory aims to explain why people make the decisions they do and what may have caused them to get to that outcome. If a decision made results in a positive outcome; it is likely an individual will attribute that to their own skill. Whereas, if a rival gets a positive outcome from a decision, it is likely that an individual would attribute that to luck. Also, should a decision made result in a negative outcome, it is likely that an individual would attribute that to external or environmental factors rather than attributing any blame

on themselves (Weiner, 1972). Geva and Mintz (1997) explain the importance of the schema when people are making decisions when explaining the attribution theory. They state there are different types of schemas such as self-schema, person schema and role schema. Each one accounts for the processing of information which may affect the hypothesis (the decision). For example, if someone draws upon other people's interpretations of the environment whilst considering the options of their decision, this would be known as a person schema. The self-schema refers to long term memories which define the person's beliefs about themselves. Social context and expected behaviours are covered by the role schema. Sometimes all these would be considered when making a decisions, sometimes just one (Geva and Mintz, 1997). This is similar to Weiner's explanation of the theory. On the contrary, it is argued that individuals attempt to edit and simplify their problems and in turn the number of choices available to them. However, this involves reducing the amount of information available to them, potentially discarding information that is vital for making a 'good' decision (March, 1994).

The rational choice theory assumes that decisions are made based on a consequences and preferences (March, 1994). This theory explains that when faced with the consequences of a decision, each are evaluated based on personal preference. Whichever consequence is favoured, that is the decision that gets chosen. It also considers alternative outcomes based on the consequence of the decision which is why it is considered a rational way to make decisions. However, March (1994) states that decision making in the real world is very different; only a few alternative decisions are considered and in-turn that means not all consequences are considered. Therefore, the expectations of the theory and what actually happens when making a decision are two different things. People tend to opt for the option that is good enough, not the best option like the theory suggests. On the contrary, this is not always the case as sometimes affecting factors such as emotion result in more advantageous decisions. Research by Shiv, Loewenstein & Bechara (2005) found individuals that had an emotional impairment were more likely to make more advantageous decisions which in turn earned them more money in the experiment. They were however less affected by the outcomes of their previous decisions compared to the control group. Emotional factors affecting decision making are discussed below.

An important theory to consider in decision making is the prospect theory by Kahneman and Tversky (1979) which analyses the processes of decision making under risk. This theory could heavily be applied to decision making within criminal investigations. The theory states there are two stages to making a decision under risk; the editing phase followed by the evaluation stage. The editing phase is when an individual considers all their options and weighs up the prospective outcomes. Options considered to be the 'best' are edited out. These edited options are then evaluated in the next stage, with the option resulting in the highest value being subsequently chosen. The theory was first developed for simple decisions with small monetary gain at risk, however it is stated it can be applied to more complex decisions like a decision in which the probabilities of outcomes aren't known; a decision similar to those faced by investigators. Therefore, individuals would be more likely to consider the likelihood of an event outcome, i.e if an investigator has little evidence but has to either arrest or let a suspect go, they would need to weigh up the outcome for each scenario. If, in their opinion, the probability of them arresting and having the right suspect

out-weighs arresting and having the wrong suspect, it is likely the investigator will take the risk. As this would have a more positive outcome for the case and for themselves. However, Nwogugu (2005) argued that it is impossible to propose a rigid model for decision making and that the prospect theory is inadequate as it was developed using method and data that was questionable. He argues that the prospect theory does not account for all of the many risks that may affect decision making. A rigid quantitative model does not accurately explain the process of decision making; there is a greater need for more realistic decision making models.

Heuristics are also discussed in the attribution theory. These are often referred to as 'rules of thumb' which individuals often rely on when they need to solve a problem; similarly, when they need to make a decision (Albar and Jetter, 2009). Although we would like to assume that we as individuals always think clear and rationally, that is not always the case. Sometimes we are not always rational as our brains can struggle to deal with uncertain decisions. This is where our 'rules of thumb' come into play more predominantly (Rossmo, 2008). For example, one heuristic within the policing environment may be that as a rule, most drug users commit petty crime such as shoplifting and robbery to feed their drug habit. Therefore, from a list of suspects, investigators would focus heavily on those with a history of drug use and/or previous history of petty crime. However, these heuristics are not regarded highly in the decision making theories due to them being very susceptible to bias. Rossmo (2008) states that although these shortcuts can save time, they can also result in distorted judgements. Going back to the previous example, the heuristic that crimes such as robbery and shoplifting are only committed by drug users may impact a policing investigation if officers or investigators use that heuristic to pursue lines of enquiry. However in contrast, Maitland and Sammartino (2014) argue that they can actually be very useful in decision making in real life, often in uncertain environments. Their research found that in politically delicate African counties, inexperienced decision makers relied heavily on heuristics and managed to build a more stable political hierarchy in those counties. Therefore, they argued that drawing on heuristics when in a real life situation can have a positive effect on decision making. However, Rossmo (2000) argues the artificial research has little or no resemblance to a criminal investigation in the real world.

Section 2 - Decision making in police investigations

The process of making a decision is not something unique to police officers however, as mentioned previously, the decisions they make during their working days, have huge consequences. Police officers/Police staff are frequently faced with difficult decisions, in a pressured environment and more often than not, with limited bits of information. Therefore, as an organisation, the police have developed a model in order to help officers and staff to make more reliable and consistent decisions; this is known as the National Decision Model (College of Policing, 2017).

The fundamental part of the National Decision Model is that the policing Code of Ethics are at the centre of all decisions made. The Code of Ethics (2014) states that there are 9 main principles in which members of Police Forces must represent at all times; accountability, fairness, honesty, integrity, leadership, objectivity, openness, respect and selflessness. It is

suggested that these 9 principles are set to encourage positive behaviour, not only from staff, but also to encourage the public to behave in the same way. These principles uphold public expectations which is why they are the core to any decision made within the force policy.

The National Decision Model (NDM) is the primary tool that all officers and staff should be referring to throughout their investigations and is what officers should refer back to when justifying the decisions they have made. The Police Code of Ethics (2014) states that the NDM makes decisions more ethical and effective as it allows for officers to question the information they receive. The model itself is continuous and can be applied constantly throughout the investigative process. This model is an adaptation of Heller's (1999) decision making process which describes it as a process of identification, analysis, assessment, choice and planning. The initial idea is the same as Heller's however, the Police Force has developed the branches more. The code of ethics are in the centre; then five aspects have been developed which all link to one another. Officers and staff are to gather information and intelligence, assess threat and risk and develop a working strategy, consider powers and policy, identify options and contingencies and finally, take action and review what happened; all the while making sure they are acting with the 9 principles of the force (see Appendix One for a diagram of the NDM).

Investigators also have the Core Investigative Doctrine (2012) by the National Policing Improvement Agency to refer to when undertaking a criminal investigation. This is a guide for the investigation process and also for decision making within an investigation. This would suggest that officers and staff have a step by step "how to" manual and decisions made in an investigation will be exactly the same. The Core Investigative Doctrine (2012) actually argues that traditionally, those coming into the police force have been forced to learn on the job which means their decisions may be governed by their own personal experiences which in turn, may be limited. Therefore, it suggested investigators often go with their own set of working rules (heuristics), influenced by their personal experiences to make decisions. This leads to decision making being very individual process, unique to each investigator which makes it difficult to produce a generic guide to "good" decision making.

As investigators are making decisions constantly during their working day, they aren't always aware of the working rules that they are using and relying on. This may cause difficulties when it comes to investigators having to document and justify the decisions they've made (Core Investigative Doctrine, 2012). This is what they would term as a 'gut instinct' or investigator 'intuition'. It is suggested that intuition is learned slowly but is fast and effortless when making decisions making it an attractive decision making method. However, due to it being difficult to control it is often prone to errors and can be influenced by other factors such as emotions (Rossmo, 2008). This suggests that decision making using intuition should be used with caution. Officer intuition will be discussed later.

Homicide investigations and decision making

At the end of 2015, the home office statistics showed there were 518 homicides within England and Wales (Office for National Statistics, 2016) and in comparison to other crime types, homicides have a higher detection rate. This could be a reflection of the competence

of homicide investigators in comparison to officers investigating other crime types (Adkin & Roach, 2015).

As there are many ways a homicide may occur, it is hard to construct a guide as to what evidence is going to be available to police during an investigation. The amount of information available is known as the information profile and this is something which determines the difficulty of the investigation (Murder Investigation Manual by ACPO, 2006). It's fair to assume, the less information available, the more difficult an investigation, which would also apply to cold/historic homicide investigations. This may account for how cases are selected for a review; based on information available and proposed solvability.

Adkin & Roach (2015) state that homicide investigations tend to be 'easier' to understand than other criminal investigations as there are always key characteristics to them such as victim, suspect, motive, modus operandi, etc. They go on to state, that as a result of that, the decision making for the senior investigating officer tends to have clearer boundaries as the key characteristics tend to guide the investigation direction.

Research conducted by Fashing and Ask (2013) looked at the decision making of British and Norwegian homicide detectives and what made them focus an investigation on the guilt of a certain suspect. They termed this a 'tipping point'. They identified two types of decisions; the decision to name, arrest or charge a potential suspect and decisions on the main lines of enquires. These were identified as typical and potentially critical tipping points during an investigation. The factors which prompted the shift in the investigation were things such as officer experience (individual factor) and what information was available to them at the time (situation factor). The research showed that experienced investigators were well aware of the risk factors regarding their decisions making during a homicide investigation.

Research by Wright (2013) discussed intuition of the homicide detective. Her research involved 40 homicide detectives looking at 20 crime scene photos and verbalising their initial thoughts. The findings revealed detectives had an intuitive ability to access the crime scene and draw inferences regarding what may have happened in the homicide. It was evident from this research that detectives were able to build hypotheses of what type of homicide was displayed in the crime scene e.g, domestic, stranger, brawl, etc, and also draw inferences of the relationship between the victim and offender, the motive and whether or not the homicide was planned or not. Intuitive thinking is associated with individuals whom are viewed to have a high level of knowledge and experience of a specific subject (Kahneman, 2011). This suggests those investigators whom have knowledge reviewing cold/historic cases would also display intuitive decision making.

Similarly, Canter (2000) identified when the FBI in America started the behavioural science unit in the 1970s that in order to assist investigations, their agents must be exposed to as much experience as possible as opposed to classroom based teaching. Experienced agents shared their on-the-job examples in order to develop the investigator's intuition. He goes on to state that the FBI instructors are the first to commend their intuition describing it as a sudden awareness, coming out of the blue which they know to be based on a previous experience. They describe it as 'God-like' and it almost feels like a superpower. However, Canter disputed these claims and put them down to intuition simply not being understood.

Using an example of former FBI profiler Roy Hazelwood, who found a fellow FBI employee brutally murdered and instantly knew the person responsible must have been a black assailant who lived in the area, he attempted to explain intuition. After some questioning of Roy, Canter broke his intuition down into three areas; sensitivity to detail, ability to perceive patterns and background knowledge. Roy had paid attention to what would be possibly be overlooked in other crime scenes; spilt soil near a plant pot. This suggested it had been knocked over when the suspect entered through the broken window which also meant the suspect had possibly lifted the pot back up. Roy's attention to detail is something that has been developed from attending numerous crime scenes and learning not to overlook what may seem like trivial details. Roy's ability to perceive the full scene as violent and disorganised but not destructive is the second part of his intuition. This is the same premise as an experienced musician picking out chord sequences in a sheet of music as opposed to a beginner just reading each individual note. The final aspect of Roy's intuition was his background knowledge. This area is where the patterns in the second part can be compared. Roy drew on his past personal experiences of viewing many crime scenes to conclude that this particular pattern of behaviour in this scene was an indication that it was a black offender that usually committed casual crimes in the same area in which they lived. This was due to the scene not displaying any bizarre or ritualistic violence but was just an un-thought-through attack.

Canter states he would be reluctant to endorse that a particular criminal behaviour links directly to ethnicity as there is no scientific data to support it in this case. However, he does not suggest that investigators intuition is completely unscientific and just a casual assumption; they are creating hypotheses based on their past experiences which is a grounding for scientific research in the future.

Sexual Offences and decision making

As stated earlier, the aim of the current research is not to compare decision making depending on the type of crime committed. It is assumed that regardless of the crime being investigated, the decisions the investigators would make would be similar, if not the same. The aim of an investigation, regardless of the type of crime, is to find the person responsible and bring them to justice.

There are many types of sexual offences which can prove quite difficult when trying to classify crimes for research purposes (Beauregard, DeLisi and Hewitt, 2017). It is found that some sexual offenders also commit homicide, however others don't. It is suggested there are three subtypes of sexual homicide; sexualized murder which are crimes in which the killing and the sexual element are related, grievance murder which is caused by aggression and anger and rape murder in which the relationship between the murder and the sexual element is indirect (Higgs, Carter, Tully and Browne, 2017). However, all would get investigated in the same manner.

The only research available when looking at historic sexual offences or historic sexual homicides is that referring to cases of historic sexual abuse, which have been made 'popular' since the revelation of Jimmy Savile (2011). Some research discusses the sentencing (Doig, 2017) and others looked at the characteristics of people who may have

suffered historic abuse (Al-Jilaihawi, Borg, Jamieson, Maguire and Hodes, 2017). When looking for research of 'cold' rape cases, and the decisions made, again, it's limited. Research by Valdivieso (2001) looks at the time limit on prosecutions in America and cold case rapes and how DNA testing, especially as it's always improving, can help prevent that.

Research into the decisions officers make whilst investigating a sexual offence crime is not something that has been investigated. As officers follow the same investigative guide for all crime types, the possible biases for the decisions they make would remain the same.

Section 3: Decision Making and Bias

Confirmation bias

Unfortunately, the process of making a decision is one that is susceptible to cognitive biases, one of these being confirmation bias. This bias will occur when an individual has a hypothesis based on the information they have available to them and from that point onwards, they look for information to support their hypothesis rather than information to disprove it (Pohl, 2004). This is supported by Popper (1959) and Wason (1960) who both state that individuals are more likely to try and confirm their hypothesis rather than falsifying it. This bias can be extremely detrimental when applying it to the decisions investigators make during police investigations; it allows for a disregard of evidence which doesn't favour their hypothesis. O'Brien (2009) conducted an experiment in which two groups of participants were given mock police files and found that group one, whom generated hypothesis early in their review of their file, showed to be seeking evidence to support that hypothesis. Whereas participants in group two who considered their hypothesis may be incorrect, showed less bias.

Many artificial studies have been conducted to investigate the effects of confirmation bias within police investigations. Rassin, Eeland and Kuijpers (2010) classified investigators with confirmation bias as running guilt-confirming investigations as opposed to impartial investigations. They conducted three studies in which participants were given a case file and asked to decide further investigation potentials. Some of the further investigations were guilt-confirming, whereas others were disconfirming of guilt. Study one found that the decision on which further investigation to take was influenced by the initial evaluation of the suspect's guilt. It was also found that the likelihood of choosing the guilt-confirming option increased dependent on how severe the crime was (study 2). It was also found that a guilt-confirming further investigation selection was linked with how likely participants thought a conviction was. Despite these findings, it was stated that the guilt-confirming option was not favoured overall and never exceeded a rate of 50% in the studies.

An infamous example of how confirmation bias can effect an investigation is the case of the Yorkshire Ripper in 1975 – 1980. West Yorkshire Police were heavily criticised due to how many times Peter Sutcliffe evaded arrest, despite being interviewed a number of times during the investigation. A vast amount of information was gathered during the investigation, however one piece of information steered the investigation down the totally wrong path. A man known as 'Wearside Jack' sent officers hoax letters claiming to be the

Yorkshire Ripper, these included an audio message in which the person had a Wearside accent. This influenced the lead investigator to strongly believe that the suspect was from a Northern area in the region and refused to entertain any other ideas or suspects (Roach and Pease, 2009). The lead investigator experienced confirmation bias and from then on, looked for evidence to support his hypothesis that the Yorkshire Ripper was from the Wearside area, when in fact, Peter Sutcliffe was actually living in Bradford in the West Yorkshire area (Brannen, 2017). He was able to carry on killing and evading arrest and taking advantage of the investigation being so misled.

Tunnel Vision

The term tunnel vision is one that is used heavily in conjunction with criminal investigations, especially miscarriages of justice and it is quite a similar bias to confirmation bias. An investigating officer may be accused of having tunnel vision if, when they have a suspect, they stop investigating anything other than them (Snook and Cullen, 2008). Many argue that tunnel vision came to the surface due to the developments in DNA science meaning many people who were convicted based on circumstantial evidence were later cleared when the real perpetrator's DNA was taken in a newer crime (Findley and Scott, 2006). This highlighted the ill-informed decisions that were being made during some policing investigations. However, Wilson (2003) argued that although wrongful convictions happen, they don't tend to be done deliberately by the investigating officer. It is purely because they are convinced that the person is guilty and the evidence they have available to them suggests they are guilty. He goes on to state that sometimes, although the person is actually innocent, the evidence suggesting their guilt could in fact be overwhelming.

An infamous real life example of tunnel vision during a police investigation is that of Stefan Kizsko. When 12 year old Lesley Molseed was sexually assaulted and brutally murdered, Kizsko seemed to be the 'ideal' suspect. He was a recluse, spending most of his time with his mother and was described as odd by neighbours. Due to a genetic disorder, he was a large man with the mental age of a child. He was subsequently arrested for the murder based on fabricated witness testimony, circumstantial evidence and a coerced confession. Kizsko spent 16 years in prison for a crime he did not commit and was only freed when DNA evidence showed the semen that was found on Lesley Molseed's clothes had sperm heads however Kizsko was infertile meaning it was impossible to have been his semen that was present. Unfortunately, Stefan Kizsko passed away less than 2 years after his release with his time in prison being attributed as a contributing factor. The real murderer was found in 2006 when he had his DNA taken after being arrested for an unrelated offence. Ronald Castree is currently serving life in prison (Roach and Pease, 2009).

A further case study example is the murder of Rachel Nickell in 1992. Rachel was murdered on Wimbledon Common whilst out walking with her 2 year old son. She had been stabbed a number of times, sexually assaulted and her throat was slit. Police didn't have a suspect until a few months later; Colin Stagg became their main suspect due to a tip off. Without any actual evidence, in desperation, the police decided on an undercover operation, involving a female officer be-friending Stagg and attempting to record a confession. He was subsequently arrested. However, the judge threw the case out due to a lack of evidence. A detective from the force later stated that the officers involved were stuck on the idea of

Stagg being the perpetrator and that no one else challenged this thought track (Sweeney, 1994, cited in Rossmo, 2008). After a cold case review and the advances in DNA years later, the real perpetrator, Robert Napper, was identified. He was already detained indefinitely in Broadmoor's secure hospital for the criminally insane for sexual offences and another murder of Samantha Bisset and her 4 year old daughter. (Moore, 2017).

Anchoring

Another type of bias that often can have an influence on decision makers is that of anchoring. Tversky and Kahneman (1974) state that individuals have a tendency to make their decisions based on the very first piece of information they receive. This is known as the anchor. In one experiment they conducted, they asked participants to spin a wheel which allocated them a number between 1 and 100. After they had got a number, they were then asked to estimate how many African countries were in the UN by adjusting their number. Those that got allocated a higher number when they'd spun the wheel, estimated a higher number of African Countries whilst those that got a lower number when spinning the wheel, estimated a lower number of African Counties. Tversky and Kahneman stated that the reason behind this was due to the participant's original number being their anchor point when it came to guessing the number of African Counties. Bahnik, Englich and Strack (2016) argue that the anchor can have much value on a decision without much attention been given to the information in the first place. Moreover, it is stated that anchoring effects can last over a period of time, for example a week after first receiving the information (Mussweiler, 2001).

In reference to a criminal investigation, the anchoring heuristic refers to how strong the information is at the start. If limited or incorrect information is all that is available, that is when investigations may be skewed (Rossmo, 2008). An infamous example of the detriment an anchoring bias may cause is the case of Jonbenet Ramsey in 1996. It was decided very early on that the suspect was not a family member despite research and statistics showing a family member is usually responsible for child homicide (Stockl, Morris-Gehring, Watts & Abrahams, 2017; Wilczynski, 1997; Jaffe, Fairbairn & Reif, 2017). Therefore, evidence was contaminated and the investigation did not progress and still remains unsolved to this day (Rossmo, 2008).

This bias can account for criminal sentencing also. Research by Enough and Mussweiler (2001) found a link between the sentence a judge gives and the demand of a sentence from the prosecution in their closing statement. For example, if the prosecutor recommends a sentence for the defendant, it is likely that the judge will be anchored by this information and it influence them when they make their decision. This can clearly be a problematic bias if you apply it to the criminal investigation.

Emotional bias

Lerner and Valesolo (2015) reviewed the role and influence of emotions when decisions are being made. They identified different types of emotions had different influences on decision making. They state that integral emotions have a strong influence on decisions in that a person would likely choose the 'safe option' when considering the potential outcome of a

risky decision. The anxiousness felt by the decision maker would be great enough to steer them into selecting what they consider to be the best outcome. They go on to state that integral emotions can still have an influence on the decision made even when there is information available to steer them in an alternative route; therefore suggesting emotions may have a harmful effect on decision making. This is because once integral emotions get attached to a particular outcome, they're difficult to detach and it is argued that this can cause otherwise rational decisions to be overridden (loewenstein et al, 2001).

It is argued that individuals are constantly in a state of emotion so it is fair to say that this emotion can influence their perception, their recall of memory and also the decisions they make (LeBlanc, McConnell & Monteiro, 2015). Furthermore, if you have individuals working in an occupation which has heightened emotions, such as police officers during a criminal investigation, it's fair to assume their emotions may have a detrimental effect to the decisions they make. There is research to suggest that police officers have been taught to conceal their emotions and not to discuss them due to a fear of being inadequate in their job role. The expectation to be a police officer or staff is to be hard and solid and to not let emotion interfere with work (Pogrebin & Poole, 1991; Yakhlef, 2017). This build-up of emotion could potentially lead to making irrational decisions during investigations.

Framing effect

De Martino, Kumaran and Seymour (2006) state that the process of making a decision is heavily influenced by how the options get presented to the individual. This is known as the framing effect. It is argued that individuals will have a different perception of a decision depending on how the original information or problem is framed (Tversky and Kahneman, 1981). For example, research which asked participants to attribute a list of qualities to beef that was either framed as "75% lean" or "25% lean". Participants attributed more positive qualities to the beef which was described as "75% lean" which suggested due to the frame, they viewed this beef more positively without even tasting any (Levin and Gaeth, 1988). This shows how influential a frame can be.

This could be a useful bias in regard to criminal investigations; if how we present information can influence an individual's decisions, then would it not be fair to say that if an investigating officer wanted, they could present evidence to their team/to the courts in order to take the investigation/court case in a certain direction. Thaler and Sunstein (2008) argue that the government and private organisations may nudge an individual to make a decision which benefits them somehow. They state as an individual's preference to a choice is almost often incoherent, it is easily influenced by outside factors. Therefore, in a criminal investigation, officers could feel outside influence from senior ranking officers in order to find a guilty person, therefore, nudged to take the investigation in a certain direction. It was also found that the framing effect has a direct association with brain activity in the amygdala suggesting emotions play a part in the decision making process (De Martino, Kumaran and Seymour, 2006) which supports research by Lerner and Valesolo (2015).

There is not much research into the effect framing bias may have on investigative decisions in police work. Ask and Anders Granhag (2005) conducted some artificial research involving 2 experiments where criminal investigators and university students both were given some facts from a homicide case. A manipulation of participants' initial hypothesis took place as

they were given information which implied the suspect had a motive of jealousy or that there was another potential suspect. The students were framed and as such, attributed guilt to the main suspect but only when they were told of a potential motive, whereas the investigators attributed guilt to the main suspect regardless of the initial hypothesis. There is a vast amount of research of the media framing the public's views on police investigations; research by Sela – Shayovitz (2015) found that the way the media presents information regarding a Terrorist attack i.e. presenting the police as heroes, really strengthens the relationship between the police and the public. This reinforces that people make different decisions and assumptions based on how information is presented to them. Another example of framing in a police capacity would be within the court room (Rossmo, 2008) in which the defence and the prosecution aim to present evidence (information) to the jury in order to influence their decision. A further area where the framing bias may have an effect would be during suspect identity parades. Canter, Hammond and Youngs (2013) found that when the person supporting the victim/witness during the line-up identification knew the identity and position of the police's suspect and the victim/witness was blind to this, it was twice as likely that the police's suspect would be chosen by the victim/witness rather than when the supporting person was also blind to the police's suspect. This suggests that because the supporting person was framed by knowing the identity and position of the suspect, their behaviour and possibly comments unconsciously influenced the victim/witness. It is recommended that the person supporting the line-up should be left blind to the identity of the suspect and what position they are in the line-up; this would reduce the possibility of any bias and strengthen the testimony (Canter, Hammond and Youngs, 2013).

Section 4: Case types

It is proposed that criminal investigations can be separated into three types of cases; those that are live, those that are cold and those that are historic. This terminology is often exposed to the general public via media platforms such as news reports. However it is unclear from existing research whether there are differences between the decisions made when each case type is being investigated.

The majority of the research regarding decision making in criminal investigations is based on live criminal investigations. A live case or live criminal investigation has a broad definition. It is a method with a wide range of objectives which covers all crime types; it involves identifying, collecting and using information or evidence in order to bring perpetrators to justice and to also adequately allow risk management, intelligence records and victim safeguarding (Stelfox, 2013). This definition will be used in respect to the current research.

A cold case or cold criminal investigation is defined as any case in which all investigative leads have been exhausted. This essentially suggests that time doesn't enter as a factor when classifying a case as 'cold'; a case a few months old could be described as 'cold' (Heurich, 2008). Similarly, the Collins English Dictionary (2018) defines a cold case as "*a police inquiry that has been suspended with the crime still unsolved*", again this does not make reference to a specific time period. It is fair to conclude that the existing definitions are quite vague and further research into what defines a case as cold is needed. The

definition that a cold case is an investigation in which all leads have been explored and the crime still remains unsolved will be used in respect to the current research.

A historic case or historic criminal investigation is a term that has only recently become more known due to the recent rise in historical sex offences being reported. There is no definition for a historic homicide but in respect to sexual offences the NSPCC (2018) defines non-recent allegations of any neglect, physical abuse, emotional abuse or sexual abuse made by a person over the age of 18 but was under the age of 18 at the time of the incident as 'historical abuse'. This definition suggests there is a stipulation on the age of the victim when the offence occurred. Despite this, the definition states a historic crime is something which is 'non-recent' however no time scale is suggested. The National Institute of Justice (2008) states that "historical" cases is simply a term used by many counties outside of the US when referring to 'cold cases' suggesting there is no difference between the two case types.

There is no existing research regarding historical criminal investigations or its definition therefore a working definition is proposed for the current research based on the above; a historical criminal investigation is a non-recent crime that has been brought to the attention of the police recently.

Cold cases

The term 'cold case' is a term which divides criminal investigators as it tends to convey that they are unsolvable and difficult to investigate. It may also suggest to the family and friends of the victim that officers are no longer investigating it which is not the case (Walton, 2006). However, the investigation is no different to that of a live homicide/sexual offence. Investigators still seek to answer the same questions; what happened, why was the victim murdered/sexually assaulted, who had the opportunity to commit the offence, how, why, where and when did it happen. The questions do not change if the case is termed 'cold' (Walton, 2006).

However, ideally, a cold case would rely on new evidence for it to be moved on any further. Research by Davis, Jensen, Burgette and Burnett (2014) looked at unsolved cold cases in Washington in an attempt to predict their solvability. They found that previous witnesses giving new information or new witnesses completely were the main factor inciting solvability. They go on to suggest that cold cases are allocated based on the likelihood they are able to be solved.

On the other hand, it is widely accepted that the forensic avenue is the first option considered by investigators. Daves (1991) stated that since the establishment of DNA and the advances in the science and the ways profiles are stored on an index, allows for undetected sexual offence crimes to be detected, with new suspects being identified for rapes. This supports research that DNA evidence is considered to be the breakthrough investigators of cold cases would want (Adkin and Roach, 2015). Although, research by Kassin, Dror and Kukucka (2013) state that forensic evidence can be subject to contextual bias in which the science is correct but the context surrounding that evidence is then used incorrectly during an investigation. They go on to state that forensic confirmation bias can

develop which may potentially have a negative effect on witnesses and their memories as well as the experts within the field of forensic science.

Adkin and Roach (2015) explain that although investigations are similar in practice, cold homicides/sexual offences have different constraints. They state time as an obvious difference which affects the investigations differently and obviously the decisions made by previous investigators have an impact. They also state that the pressures on officers are slightly different to a live investigation; if a cold case is being reviewed and it's one that generated great media coverage, it is public perception that new evidence has been discovered.

The Murder Investigation Manual (2006) doesn't offer advice on what investigators should do when a homicide investigations goes from 'live' to 'cold'. Mendell (2014) argues that there can't be one book which is the "magic bullet" in solving cold cases. He states that cold cases require the investigator to be persistent, hard-working and have the ability to look at the case as a fresh with a new perspective. He goes on to state that there are 15 keys to a cold case investigation, which he realises are nothing new to experienced investigators. These include; basic identifiers, the scenes including the body, technological devices, documents, expert assistance, family/friends, finances, forensic evidence, internet history, vehicles, professional and occupational information, psychology, published materials, witnesses and traceable objects. Furthermore, Mendell (2014) goes on to explain that the cold case investigator needs to be able to be flexible in able to act when new evidence materialises and should aim to build a total picture of the case, using the 15 keys almost as a checklist. He states the 15 keys are a great starting point for investigators to build on and make decisions from.

Historic cases

At the present date, there is no separate research which defines the difference, if any, between a historic homicide/sexual offence and a cold homicide/sexual offence. Therefore, there is also no research on the decisions made during historic homicide/sexual offence cases, meaning it is impossible to say whether investigators would experience the psychological biases mentioned above. There is also no definition provided for what a historic criminal investigation is. This suggests there is a big gap within the realm of criminal investigation research.

The majority of research, as a whole, available on live homicide and cold homicide tends to be American. In comparison, there is little research in this area coming out of the UK. Therefore, it is vital for improvements to UK policing that decision making during criminal investigations is looked at dependent on the status of the case.

Bias dependent on case type

All the research of biases within police investigations appears to only focus on live police investigations. There is quite clearly a lesser amount focused on bias within cold case homicide/sexual offence investigations (Adkin and Roach, 2015) with virtually no research at all on historic homicide/sexual offence investigations. Therefore it is difficult to say whether

the same biases which effect decisions on a live investigation would also have the same effect on cold or historic investigations, if they're even present at all. This research aims to identify the possible biases within cold and historic homicide/sexual offence investigations.

With regard to the framing effect, Roach (2017) states that the frame for cold case homicides/sexual offences, is the term 'cold'. It suggests these cases are difficult to solve which is likely to make the officers feel more pessimistic and negative than when they're investigating a live homicide/sexual offence. He goes on to state that the psychological frame lessens the investigator's control over the case as its direction has already been decided by decisions made in the previous investigations. This therefore needs further exploration as this bias could have a detrimental impact on those investigating cold cases and may contribute to the fact that some of these cases remain unsolved.

There is no research to date which investigates the effects of confirmation bias on cold or historic investigations. It is argued that the actual process of a review may welcome confirmation bias in the cold case investigation as if confirmation bias was present in the first investigation, it is likely it will be present in all the following reviews unless the investigator starts the entire investigation from scratch (Roach, 2017). Furthermore, if no new leads are available to the investigator, it's argued that it's likely, providing the procedures were correct, they will agree with the previous decisions made by other investigators thus displaying confirmation bias (Roach, 2017). Adkin & Roach (2015) explain that cold case investigators are at the mercy of the previous reviews/original investigation with regards to the retaining of evidence and exhibits, and how they record what they have done for future investigations. This may also increase the likelihood of confirmation bias, as they may have a biased view of the information available to them, especially if they have knowledge of the case as well, from either colleagues or the media (Roach, 2017).

As a result of the existing research, the current research has two main research aims with specific objectives within:

The current research has two main research aims with specific objectives within:

- 3) To explore decision making within the different case types (live, historic and cold).
 - Using the existing working definitions of the case types, the research will probe any differences in decision making in relation to the type of case (live, historic and cold).
 - To provide definitions using the views of individuals whom have an extensive policing background and have personal experience in investigating all three case types in their career.
- 4) To examine any cognitive bias across the different case types (live, historic and cold).
 - Analyse the types of bias that may affect decision making in an investigation and whether certain biases affect a certain type of case.

- Explore whether the prevalence of the framing effect varies by case type.
- Explore if the investigating officer have their decisions framed in relation to a cold case simply by knowing a competent detective couldn't solve previous to them suggesting they may accept defeat before even looking at the case.

Methodology

Kuhn (1962) states that research paradigms are defined as shared beliefs and agreements between scientists regarding the way problems should be looked at and understood. Guba (1990) believes that paradigms within research can be split into two categories which will be explored below.

Ontology and Epistemology are philosophical paradigms of research which were considered prior to this investigation, as these act as a foundation to the research (Vanson 2014). It is important to be aware of epistemological and ontological position of the research.

Ontology is described as the things that exist; knowledge and reality whereas epistemology considers whether knowledge is concrete or whether it is more subjective based on personal experience (Dieronitou 2014).

Ontology – constructionist

Ontology can be split into two main positions; objectivism and constructionism (Bryman, 2004). The ontological position for this research is constructionist. This position argues that social articles are socially constructed by the experiences, perceptions and actions of an individual. So in respect to the current study, this paradigm states that the participant's knowledge of cold/historic homicide/sexual offences is not something that is simply discovered one day, but rather it is constructed by humans through their interaction and life experience (Morcol, 2001).

On the other hand, the objectivist position would state that knowledge already exists on its own merit and individuals just know things. This paradigm suggests a lay person would have knowledge of cold/historic criminal investigations regardless of experience, which is not true.

The ontological stance of constructionist was considered when considering the sample for this research as this was one of the challenges this research presented; finding the appropriate people with specific knowledge. As this knowledge in the area of criminal investigations could be considered niche, it was important to conduct the research with people whom had great knowledge of criminal investigations and the decisions made in order to attempt to offer answers to the research questions proposed.

Epistemology – interpretivist

The epistemological position of the current research is interpretivist. The interpretivist paradigm goes hand in hand with the constructionist ontological position. Interpretivist researchers too believe that knowledge is an interpretation by the individual based on social experiences (Dieronitou 2014) and appreciates that every individual is different so will have a different views. However, the clear disadvantage to this is that it is quite subjective and may be susceptible to bias on the behalf of the researcher. Therefore, although the interpretivist interviewer may have small insight into the research topic, they are to keep an open mind to new knowledge that may come out during the interview. This highlights the whole idea behind interpretivism; that knowledge of social realities and time cannot be

learned prior and that humans adapt to information they are informed of from others, experiences, or the world around them (Hudson & Ozanne, 1988).

Due to the broadness of the aims of this research and the vast amount of experience the participants would be able to share during the interview, it was felt the interpretivist epistemological position was best suited to frame this research as to understand the decisions made in criminal investigations, the knowledge has to be learned from those with experience. As mentioned above, obtaining the correct sample was the main challenge when setting out to conduct this research. Without interviewing people with the appropriate knowledge and experience, it would prove difficult to answer the research aims.

Data Collection - Interviewing

Many different methods were considering when selecting how the data was going to be collected but it was evident from the off- set that an in-depth interviewing method would be the most suitable as it allows for those people who have the knowledge and experience of a certain subject to divulge their thoughts, opinions and motives (Rubin & Rubin, 2011). An interview allows the researcher to have a greater understanding of the research subject. Due to the current research focusing on cold or historic homicide/sexual offence, the appropriate people, e.g police officers/investigators needed to be interviewed as these are the people that have the knowledge in this area. Selecting the type of in-depth interview method was the next step.

The initial method considered was a focus group, especially considering the pool of participants whom have the experience of investigating cold or historic homicides/sexual offences is extremely small. Kitzinger (1995) talks about the positives of the focus group and goes on to state that not only do they allow for in-depth, large amounts of data to be collected in a tight time frame, they also make participants whom may not be as confident, feel more comfortable to be interviewed. He goes on to say that in a focus group situation, people who feel they have nothing to say are encouraged by the others to speak their opinions that they may not have said in a one to one interview. Often participants tend to bounce off each other, often agreeing with other's opinions or striking up a conversation around one of the questions (Stewart and Shamdasani, 2014). However, due to this research investigating the possible effects of framing, a focus group would not have been the best method of data collection. The aim of the research was to find out what investigators first think when they hear the terms 'cold' or 'historic' which would have been impossible to achieve without the use of individual interviews. The potential of peer discussion may have affected the reliability of the data and consequently confounded the study.

The next method considered was using unstructured interviews. In this method, interview guides are not used and the participant could explore the subject of cold/historic homicide/sexual offence in their own way. This would allow for extremely in-depth, unfiltered and wide ranging data to be collected. The flexibility of the interview not only benefits the participant, but also the researcher as new hypotheses may arise due to what the participant discloses (Brinkman, 2014; Kajornboon, 2005). However, unstructured

interviews have many draw backs, especially if the interviewer is inexperienced. There is the danger that inappropriate follow up questions may be asked during the interview which could result in the participant feeling uncomfortable or even starting to provide irrelevant information. Due to the vast amount of data gathered, unstructured interviews are difficult to analyse, especially under time constraints (Kajornboon, 2005).

Considering the limitations of both an unstructured interview method and a focus group, a semi-structured interview design was deemed to be the most appropriate technique to employ in this research. A semi-structured interview is designed to address a specific research topic but also leaves headway for participants to offer more diverse meanings to the topic (Galletta, 2013). Longhurst (2003) states that semi-structured interviews consist of pre constructed questions. Not to be confused with structured interviews, they are very open and encourage a more conversational style of interview. This allows for the interviewee to offer more information on the topic of the interview. This style of interviewing is very similar to the interview technique that Police Officers and staff use themselves, which was another reason why this method was chosen as they would be familiar with the process of wanting to obtain as much information as possible. There is vast amounts of research and evidence supporting the use and effectiveness of this method; Harrell and Bradley (2009) developed a course on semi-structured interviewing for Police in the US and found that it was a more efficient way to collecting more accurate data. However, despite the opportunity to gather vast amounts of data being considered as a positive to conducting a semi-structured interview, it can also be a negative of this method. Interviewees may find themselves going off track and giving information which doesn't actually answer the original question (Longhurst, 2003). Therefore, interviewers must be aware of this and keep the interview focused. Galletta (2013) goes on to state that using a semi-structured interviews allows for the complexity of the research topic to be explored meaning a lot can be accomplished using this method. Furthermore, it is one of the only methods which encourages reciprocity between the participants and the researcher meaning the rapport during interview is much more positive and in turn, creates a space where the researcher can probe or clarify a participant's response, reducing researcher interpretations.

The Interview Guide

Kajornboon (2005) states that there is much preparation for an interview prior to actually conducting the interview itself. One of the main things that the researcher must do is have a clear understanding of why they are conducting the interviews and what their purpose is. Therefore, it's essential to construct an interview guide (King, 1994). The guide is to assist the researcher; to keep the aims of the research in mind and decide the direction of the interview. The guide includes all of the questions in the order they will be asked in. The researcher will consider any prompts and the guide can be used for a practice run of the interview.

Eight interview questions and three scenarios were decided prior to any interviews being conducted. The questions were decided with the aims of the research in mind. All the interview questions were standardised and all participants were asked the same questions.

All eight were open ended questions meaning the interviewees could go into depth with their answers. Some of the questions also included prompts which the researcher could use if the participant went off track or had not quite answered the question with their first response. This made sure that appropriate amounts of data was collected in each interview and that the question was answered fully.

The scenario questions were also open ended however, they tried to draw upon possible real life examples that the officers may, or may not have, come across in their investigations. The scenarios asked how confident they would be looking at a case based on the information (the frame) given to them.

Please see Appendix Two for the interview guide that was used in the research.

The combination of both styles of questions not only kept the participants interested and engaged during the interview but also allowed them to not only communicate their procedural decisions, but also communicate their initial thoughts based on what information was available to them.

The questions were used in a practice prior to any interviewing of participants and although the questions themselves were deemed appropriate for use, feedback suggested that the order of the questions in the guide was amended. Prior to the change, the questions appeared to jump subjects and didn't flow very well; for example, participants were originally being asked about a cold case they had investigated without initially describing what the process is for investigating a cold case. Therefore, these questions were adjusted to allow for a more chronologically ordered interview.

Ethical Considerations

The British Psychological Society (2014) code of human research ethics was considered prior to conducting this research. One of the main concerns around this research was the confidentiality and anonymity of the participants and information they divulged, especially if they spoke about an ongoing investigation. If details such as names, locations, potential suspects, etc were disclosed, it could negatively impact on investigations. Similarly, due to the nature of participant's backgrounds, if their personal details were not anonymised in the data, this could pose threats to their safety. Therefore, participants were informed prior to signing their consent form that all data will be anonymised and confidentiality will be maintained. Each participant was assigned a letter and they were informed of this letter on their debrief sheet in case they wanted to withdraw their data. During the transcribing process, all real names were removed from the dataset.

A further ethical concern was the prevention of psychological harm for both the participant and the researcher. Due to the research being on real life homicide/sexual offence cases, some of the content of the data could potentially cause psychological harm to the researcher, especially since they are not police officers or investigators. Likewise, even though the participants will have dealt with crimes such as these during their daily workload, certain cases may have affected them more than others. Therefore, participants were advised prior to interview that if they did not wish to answer any of the questions,

they did not have to and to also not discuss any case which may have effected them at the time of investigation. They were advised, if they were negatively affected by the interview, they must let the researcher and their line manager know. Following this, force protocol could be followed in providing psychological support. Similarly, the researcher was also offered this support by the Detective Inspector of the cold case review team.

Participants

A purposive sampling method was used to select the participants for this research. Black (2010) defines this method as the researcher making a judgment as to what criteria they want their sample to have which represents the target population. Certain participants are chosen often because they have a specific characteristic which will allow for a more detailed interview on the subject the researcher wishes to explore (Ritchie, Lewis & Nicholls, 2013). The reason this sampling method was chosen over the others was simply due to the topic of the research. There are very few individuals that have many years' service in the Police Force, whom have investigated live homicide/sexual offences and have since then used their investigative skills to review cold homicide/sexual offence cases. Therefore, it would be impossible to just have a random or opportunistic sample for this research. Although these sampling methods may achieve a larger sample size, the topic is such a niche area, that those considered as "experts" needed to be interviewed.

As the sample criteria was quite specific, only a small number of participants were obtained. This was simply down to time constraints meaning officers from only one police force were used and due to the fact not many officers within the force have experience in investigating cold or historic homicide/sexual offences. Previous to any research, access and consent was gained from the relevant people in the force.

The 7 participants were all from a dedicated team whom review undetected homicide and sexual offences as part of their day job. They were all of varying policing backgrounds, with all of them having previous service as Police Constables or Detective Constables, one even previously been a Detective Sergeant and all had experience working on all kinds of crimes, including live homicide and sexual offences. All were fairly recently retired from the force and had come back as police staff to work on this specialised team due to their experience. Their role title within this team were either Advanced Investigative Officers or Investigative Officers.

Interviewee A – This person was a retired police officer with over 30 years' service with half of that spent as a Detective Constable and in the last seven/eight years of their service, they worked in the Homicide Major Enquiry Team (HMET) dealing with serious crime. This included murders, abductions and stranger rapes. They retired in 2012, had a break from working and then returned as police staff in 2015, eventually transferring to work on the cold case review team. This person felt due to working previously on live murder investigations that this team was an area that they could contribute towards.

Interviewee B – This person had been on the cold case review team since 2015 and previous to that was a servicing police officer. Before their retirement, they worked in HMET and they retired in 2011. This person then did some investigation work in the private industry

but wanted to come back and work on the cold case review team to do a “proper job” (Appendix 8 - Interview B, line 8).

Interviewee C – This person had 25 years’ service as a Police Constable prior to retiring in 2015 and had worked in many different departments over the years; neighbourhood, CID, HMET and firearms. They were personally invited to join the review team by the Chief Constable due to their experience they had.

Interviewee D – This person started their policing career in another force but sadly got injured so medically retired from the force just short of 10 years in. They relocated and joined the current police force as police staff doing various roles but ultimately ending up being an investigative support officer within HMET. Then ended up on the cold case review team. They have worked many cases over the years and also ended up being used by HMET for 3 years to help assist with live investigations. So all in all, this person has 30 years’ service within the police force.

Interviewee E – This person retired in 2013 and had been a detective for all their career. They had worked in specialised areas such as stolen vehicle squad, counter terrorism unit, HMET and CID. This person had worked a lot of homicides during their time. Once retired, they got a job with no responsibilities and then out of the blue, received a letter from the force inviting them for an opening evening to discuss the new cold case review team.

Interviewee F – This person worked for 32 years in the force before retiring. Struggling to adjust to life outside of the force, they came back as a police staff member working in the duties department, then moved to safeguarding as an investigative officer and then joined the cold case review team in 2015. As a police officer, this person worked their way through uniform, then joined CID, worked HMET, had a break and then went back to HMET.

Interviewee Q – This person retired as a Detective Sergeant on the HMET team after 30 years of service. They had only been out of the force for around 3 months when they took up the Chief Constable’s offer as being an investigative officer on the cold case review team.

The Interview Process

Due to currently being a police employee, gaining access to the participants was fairly straight forward. Contact was made with Detective Chief Superintendent of the crime team of this particular force, whom has since retired since the write up of research. He gave permission for the Detective Superintendent in charge of HMET (Homicide and Major Enquiry Team) to be contacted. He then liaised with the Detective Inspector in charge of the cold case review team. The identity of the potential participants was known at this time. The interview date was organised by the Detective Inspector of the cold case review team as he knew what his team’s workload was at the time and whether they had the capacity and time to be interviewed. An email was sent with an interview schedule which included the names of the officers that had volunteered to take part. All 7 were interviewed in one day and each participant was allocated a 50 minute slot. The majority of the interviews were between 40 to 45 minutes. The interviews took place at the Police building in which the cold

case review team usually work from. A briefing room was booked for the day in order for the interviews to be conducted in privacy.

A Dictaphone was used to record the interviews. This allowed for full attention to be paid to the interviewee rather than trying to make notes as they spoke which would affect the rapport with the interviewee and could impact on how open they were with their answers. Research found that the accuracy of information gained from an interview increased when being heard as opposed to watched, especially when detecting deception (Maier and Thurber, 1968). The interviews were then transcribed at a later date.

When participants first entered the room, they were greeted and thanked for their time. They were given the information sheet (Appendix Three & Appendix Three A) to give them a brief outline on what the interview would entail. They were then asked to read and sign a consent form (Appendix Four and Appendix Four A). After this, the participants were advised that the interview would be being recorded and it was reiterated that they didn't have to answer any of the questions if they didn't want to and had the right to withdraw throughout. Once they were happy, the interview commenced.

When all the questions had been asked, the Dictaphone was stopped and the participants were thanked once again for their time. They were then given a debrief sheet (Appendix Five and Appendix Five A) which detailed the researcher's contact details should they need anything or wish to withdraw their data. They were also given information on what the steps would be if they felt they needed any psychological support after the interview.

Data Analysis

As the data collected by the interviews was qualitative data; a thematic analysis method was used to analyse it. Joffe and Yardley (2004) state thematic analysis is underpinned by content analysis, a different data analysis method. This method looks at how frequent certain things are mentioned within the data which allows researchers to draw an inference from. However, thematic analysis goes one step further and not only does the frequency of topics arise get looked at during the analysis, so does the context they are in. This is known as a theme in thematic analysis. It is argued that there are two types of themes; the manifest theme and the latent theme. The manifest theme is when a particular topic is mentioned directly in the data for example, low resources whereas the latent theme is when the topic is referred to indirectly, for example, stating there aren't enough officers so work load tends to be unmanageable. The advantage of the technique is that it analyses both types of themes. Bauer & Gaskell (2000) advise that the difficulty of thematic analysis comes when the data is first coded. He states the codes should be done with the reason and aims of the research in mind and should flow rather than just coding every different thing mentioned within the data.

However, some researchers believe thematic analysis is restricted in the sense that it is quite easy for researcher's to analyse the sections of data which support the research aims. In a good thematic analysis, the entire data should be analysed; the researcher must not select certain parts of the data in order to support the research aims/hypotheses. The aim of thematic analysis is to make sure a balanced view of the data is presented (Joffe, 2012).

Providing the researcher is aware of this possible disadvantage, it is less likely to arise when analysing the dataset.

Findings

The current research has two main research aims with specific objectives within:

- 5) To explore decision making within the different case types (live, historic and cold).
 - Using the existing working definitions of the case types, the research will probe any differences in decision making in relation to the type of case (live, historic and cold).
 - To provide definitions using the views of individuals whom have an extensive policing background and have personal experience in investigating all three case types in their career.

- 6) To examine any cognitive bias across the different case types (live, historic and cold).
 - Analyse the types of bias that may affect decision making in an investigation and whether certain biases affect a certain type of case.
 - Explore whether the prevalence of the framing effect varies by case type.
 - Explore if the investigating officer have their decisions framed in relation to a cold case simply by knowing a competent detective couldn't solve previous to them suggesting they may accept defeat before even looking at the case.

Four themes emerged from within the research; lack of clarity in definitions, potential bias affecting decision making, evidential breakthroughs and pressures faced and their effect on decision making. Each theme will be explained and sub –themes within will be explored below.

Theme one: Lack of clarity in definitions

Previous research does not give a definition of historic homicide/sexual offence crimes and therefore this research aimed to construct a definition and investigate whether there is a difference between the terms cold and historic.

A key theme that emerged from the dataset was that of the lack of clarity around definitions/terminology in the force. When asked, the majority of participants did not feel there was any difference between the terms 'cold' and 'historic' when referring to cases:

"No it's exactly the same"

Interviewee Q, line 27

"It's like they're not a separate category anymore"

Interviewee B, line 23 – 24

“They’re basically the same thing. I think no differently when you say cold to then you say historic.”

Interviewee C, line 15 – 16

It was found that some participants thought ‘historic’, rather than ‘cold’ was the more appropriate term to cover all of the crimes this team investigates. This supports findings by Walton (2006) which found that the term ‘cold case’ was one that divides investigators due to its negative connotations communicating that the case is unsolvable and that it is no longer being investigated. Meaning a more appropriate term should be considered moving forward.

Further supporting evidence from the dataset regarding a more appropriate term for these cases was found as some of the officers thought ‘undetected’ would be a more fitting term:

A cold [case] yeah, an undetected historic offence”

“I think cold is a term that we just get used to using really”.

“I just think it’s when you mention to other people. Some people have an understanding of what cold case is from what they see on the television”.

Interviewee D, line 20; 24; 27 – 29

“I think it’s the wrong term to us. Because ‘cold case’ tends to suggest that it’s gone cold and we’re not doing anything with it. And that’s not true...it’s a major investigation review that we’re doing”

Interviewee Q, line 14 – 16

It is suggested that the term ‘cold’ has been made popular with the lay person due to media outlets such as the news and fictional crime series, therefore, it is easier to use this term as it is a familiar one. However, should the term ‘undetected’ be used instead due to it having more positive connotations, it would broaden the scope for the amount of cases the team would have to review. Criminal cases where the suspect has been identified but acquitted at court would also be classified as ‘undetected’ due to the responsible person not being confirmed/convicted. However, this would open up another realm of issues around the double jeopardy legislation which protects individuals from being tried for the same offence twice (Haddad and Mulock, 1969). Therefore, a clear definition of what type of cases this team should be investigating is needed.

Despite the majority of the participants feeling there was no difference between the terms ‘cold’ and ‘historic’, some of the officers did think of them as two separate crime types and attempted to provide a definition for them both in order to highlight the differences between them:

“[historic] ...we’re trying to find a victim to see whether we do have a case to investigate. Whereas in the cold case murders, we know we’ve got a victim because this

person was killed 20/30 years ago and all the evidence that was collected back then is there for us to try and find...”

Interviewee A, line 61-64

“A cold homicide case is a previously investigated homicide, that’s been taken to as far as an investigation is concerned and it has come to a natural halt.”

“It’s got to be termed differently because, er, historic murders would encompass detected murders you know [crime statistics]”

“So to me, a historic murder, you know things that are current you wouldn’t class as historic but say, 10 years down the line, then I think you are sort of getting into historic”.

Interviewee E, line 16 – 17; 24 – 25; 28 – 30

“A cold homicide means to me that it’s a, obviously a death of somebody, that we haven’t got a suspect for or has not been taken to court so therefore it’s undetected.”

“There is no time constraint, as long as all the enquiries have been done and you haven’t got anywhere, then yeah, it’s gone cold. Doesn’t have to be old.”

“Historic can be anything that’s happened in the past be it 12 months ago...”

Interviewee F, line 13 – 14; 15 – 17; 22 – 23

Previous research in this area has not been able to provide a clear definition of historic cases, with the definition of a cold case coming mainly from American research, and although the consensus from the interviewed officers is that the terminology isn’t quite right, there still clearly is a difference between cold and historic homicide/sexual offence cases. From the dataset it is clear that all officers agree that a ‘cold’ case is an investigation that involves a known victim, in which all the investigative leads have been explored, no matter the time scale, and a suspect hasn’t been identified. Whereas a ‘historic’ case is a crime which happened in the past, classified by an undetermined time scale, and may not actually have a victim. It is fair to say that further research is needed to fully explore the potential differences between the two case types that have been identified here. It is possible that the differences between the case types are purely subjective depending on the officer.

Theme two: Potential bias affecting decision making

Another key theme that materialised from the dataset was that of types of biases that could potentially affect the decisions the officers make when investigating cold or historic homicides/sexual offences.

Emotions

There is existing research regarding the influence emotions can have on decision making with Lerner and Valesolo (2015) arguing that emotions can have a strong influence on the decision made even when there is information available to steer them down a different route. However, there has been research conducted specifically on police officers and how emotion may affect their decisions finding that officers are taught to conceal their emotions and to not let them interfere with their responsibilities (Pogrebin & Pool, 1991).

All the officers whom were interviewed believed that their emotions would not influence any decisions they make during an investigation, especially when investigating a cold or historic homicide/sexual offence:

“They don’t really. I’ve been doing this job for far far too long for emotions”

Interviewee B, line 208

“I don’t think they do”

Interviewee Q, line 257

“I’ve never been in a position where emotions have dictated the way I’ve done a job.”

Interviewee E, line 167

This could be explained due to the social expectation for police officers and staff to be hardened to the cases they may be exposed to. Research conducted by Yakhlef (2017) which looked at the conception that police officers should show no emotion found newly recruited officers were told to not show emotion as it would be considered a weakness. The results found that officers tended to use jokes, teasing and ‘banter’ between each other in order to cope with their emotions.

Whereas most of the officers agreed that emotions play more of a part during a live job investigation; *“Effects more live jobs”* (interview Q, line 257 – 258) which was further explained due to being surrounded by emotional individuals such as family and friends:

“Definitely more on a live job. You’re speaking to witnesses in the crux of it. They’re emotional, you can’t help but feel it too.”

Interviewee C, line 92 – 93

This could be explained due to the time aspect; as Interviewee C stated, during a live investigation, officers are speaking to highly emotional people and are also under the pressure of following up enquiries quickly whereas when investigating a cold or historic

case, a long period of time has normally passed and those involved have often started to move on with their lives and don't appear to be as affected by what has happened. Despite stating that emotions don't have an influence, some of the officers admitted that they do have some form of emotional feeling for the case you're dealing with which they deem to be a normal human reaction:

"Obviously you do become attached to the case that you're working on. But, er, emotionally, no I don't think you get involved in it"

Interviewee A, line 263 – 265

*"I mean you can't help but get drawn into what victims have been through."
"If at the end of it all you get the result you want, you know your emotions do spill out, just from a success point of view. But it's for the victim."*

Interviewee D, line 202 - 203; 212 – 213

"Erm, if you didn't become or didn't have any emotions whatsoever, you'd be a robot. So you've got to feel for, like the victim in the 81 case, I mean, that's such a sad set of circumstances you've got to feel for..."

Interviewee F, line 117 – 119

"Emotions do, it happens sometimes after, I worked on a case and was quite upset when I got home".

Interviewee E, line 170 - 171

So although the emotions don't come into play when decisions are being made, investigators do still have an emotional involvement to an extent. Research by Brown & Daus (2015) found that officers are aware of their emotions and that they could potentially have an effect on the decisions they make however they make a conscious effort to control their emotions.

Furthermore, some officers stated they felt certain emotions whilst reviewing a cold case due to picking up investigations that were often first completed a number of year ago. With the changes in policing over the years, things were done very differently previously as to how they're done now. The relationship between the police and partner agencies were not as good as they are now:

"I do make comments about decisions that were made at the time, but that's just different times isn't it."

Interviewee E, line 164 – 165

“But emotionally, you get a little bit annoyed sometimes, a young lad had got murdered in some flats, 2 years ago, had learning difficulties, and actually if the support agencies had done their job, he’d be alive now”

Interviewee Q, line 263 – 265

This supports the improvements in policing methods over the years; Greene (2014) states that the research in policing has developed over the last 100 years and it is welcoming new ideas in the methods of policing. Tilley & Laycock (2017) discuss how limited police resources are a factor that needs to be considered in future methods. They state how evidence-based policing is the best and most important method of policing but it needs to move with the times; the new criminal demands such as cyber and terrorism and also move forward with the new technologies available. For example, now most crimes are on a computer data base system of HOLMES, it will make the reviewing aspect of an undetected crime much easier and less time consuming.

Tunnel Vision Bias

There is vast amounts of research connecting tunnel vision bias to criminal investigations however a sub theme which arose from this dataset was that tunnel vision bias was unheard of when investigating cold or historic homicides/sexual offences.

The reviewing process described by the officers suggests it would be nearly impossible to be affected by tunnel vision bias. This is due to the officers reviewing every single part of an investigation prior to deciding which direction they can take it in;

“So it’s a case of finding all the documents and it’s a painstaking job of reading through absolutely everything cos’ the idea is, at the end of the day we’re going to produce a review document. So we’ve got to be able to say we’ve done it thoroughly. That we’ve looked at the witnesses, looked at potential suspects back then, we’ve looked at the forensic policies.”

Interviewee A, line 83 – 87

“Because if you don’t understand what’s gone on, then it’s really difficult then to try assimilate all the facts.”

Interviewee E, line 40 – 41

So as a process, the officers would collate everything they have such as statements, evidence, briefing notes and see how far the investigation had been taken previously which allows them to evaluate what the officers have done originally. It may be argued that tunnel vision is a bias that is more likely to happen during a live investigation, meaning it is picked up by those reviewing the case if it becomes cold. For example, in the case interviewee Q was reviewing, unfortunately the officers whom first investigated the murder had tunnel vision. It is a murder and rape of an elderly woman in 1994 whom no suspect was

ascertained. Two weeks later, around a mile away from the first murder, another elderly lady was raped and murdered in a similar way and this time a suspect was arrested and charged.

“The assumption back in the day was well he’s done both. It’s a mile away and there’s so many similar facts so he’s got to have done both.”

Interviewee Q, line 84 – 85

Officers at the time made the assumption that this man also committed the first murder so they stopped their investigation, convinced they had the right man. However, the suspect was only charged with the second murder as the judge stated there was not enough evidence to charge for both, hence why this case remains a cold case. The case was reviewed around 7 years ago and a DNA profile was obtained from the victim. Due to the advances in DNA from when the murder happened and when the case was reviewed, it opened up a new door:

“So what we’ve got is an unknown DNA of an unknown suspect. What we can do though is get the other murderer’s DNA and say ‘can you test that against that’. And guess what? It ain’t him.”

Interviewee Q, line 93 – 95

So due to the police at the time in 1994 making the assumption that the suspect for the similar murder committed both, the actual suspect has been free in society. Interviewee Q has now started the entire case again and found other leads that were not pursued at the time due to them thinking they already had their suspect:

“So I’ve gone back in and basically told them, the senior officers, I think you’re wrong, we shouldn’t be looking at that, we need to start all over again.”
“...we’ve got some very very good e-fits of two unsavory characters who were wondering around that area, at that time, that were sort of looked at in the 90s but we overlooked as it was a ‘don’t look too hard on them because he’s done it’ and that’s what I’m doing at the moment and it is fascinating.”

Interviewee Q, line 102 – 103; 109 – 112

This reinforces the argument that Findley and Scott (2006) put forward in which many injustices in police investigations came to light due to advances in DNA science. However, the suspect in this case, was still a guilty man. Again, this example shows how easy it for officers to stop investigating other potential suspects when they have a main suspect in mind (Snook and Cullen, 2008).

Further evidence of the unlikelihood of tunnel vision bias happening in a cold case review is the case Interviewee A spoke about. It was a murder of a female whose body was found in a shallow grave in some woods in 1992. There was little evidence and not really any potential suspects at the time. Whilst this case was being reviewed, another body of a female was

found in the exact same place, murdered in a similar way. This time, forensic evidence was found and a suspect was identified. This man also became a suspect for the 1992 murder:

“So what they were thinking of, which was the same as what I was thinking at the time, what’s the chances of someone else committing a murder and burying a body in the same wood, in similar circumstances. But you’ve got to keep an open mind. I didn’t pin all my colours to that mast, I didn’t say ‘it’s definitely that person because he’s done a murder 10 years later.’ You had to look at everything. I kept an open mind about the earlier suspects.”

Interviewee A, line 153 - 157

Therefore, the dataset highlights how tunnel vision is more common in live investigations as opposed to a cold or historic investigation i.e. Lesley Molseed and Rachel Nickel (Roach and Pease, 2006). This is due to the rigorous process of reviewing an unsolved case as officers look at every part of the case, including every possible suspect and make sure they have been investigated thoroughly and are aware they must keep an open mind in order to try and secure a conviction.

Confirmation Bias

On the contrary, the dataset found that confirmation bias is still quite evident within the cold case investigations.

For example, the case which interviewee B has been investigating; it was a murder of a gentleman in 1985 who was found in the boot of his own vehicle. It became apparent that the gentleman was homosexual, which, in 1985, wasn’t as accepted as it is now. He was found with items that were not his and they were all of army issue manufactured specifically in Canada. An item of the clothing had a name on it which showed under crime scene light. Police at the time did enquiries and identified a suspect. The suspect fit all the criteria; was in the armed forces, stationed in Canada, had homosexual tendencies, had violent tendencies and circumstantially, he appeared to be a good suspect. Unfortunately the Crown Prosecution Service didn’t support a prosecution. When asked about the decisions being whilst reviewing this case, the officer confirmed they were still investigating with this man being the suspect:

“...the forensic review is continuing. So I’m waiting for results on that. That’s the main decision and then looked at the possible relationships of those involved.”

“So one of the things is looking at allegiances of people back then.”

“[Back in 1985]...his estranged wife phoned crime stoppers and basically said, he was responsible for it. So again, went to question her back in the day and she basically said oh it’s because I’ve fallen out with him...”

“So unfortunately, I was due to go see the wife, unfortunately she’s died earlier this year.”

Interviewee B, line 122; 124 – 126; 126- 127

This research confirms that of Phol's (2004) in which this case already has a hypothesis that the suspect definitely committed the murder so it appears no other evidence is being considered or re-looked at to see whether the original suspect, was the only one. Similarly, interviewee F discusses a case they are currently investigating which is being linked to a later murder of a young woman. It is believed the same man committed both, among others:

"The 96 one came about as a result of a case I did work on, a live case that I did work on. That er, it was another female victim that was kidnapped and found murdered in 2004. The suspect for that, and I worked on that enquiry, he'd never come to our attention before in his life until that point. We looked back over the cold case murders that we had already got, my 96 female being one of them, and the potential for him to have committed it."

Interviewee F, line 91 - 96

Therefore, the enquiries made on that case are now made with the hypothesis that that suspect committed that crime. It is unclear whether other suspects have or will be considered. This could be explained by the desire that individuals have to want to confirm their hypothesis rather than falsifying it (Popper, 1959; Wason, 1960). It is fair to suggest that confirmation bias exists whilst investigating both cold and live cases. This finding is quite contradictory to the suggestion that tunnel vision bias does not exist when investigating cold or historic cases as the findings suggest no other suspects are being looked at in the case examples offered by interviewee F and B. However, it is possible that those officers have conducted a thorough review over all of the available evidence and simply arrived at the same hypothesis the original investigator did; this wouldn't be tunnel vision or confirmation bias, this would simply be officers following the evidence.

Framing Effect

One of the research aims of this dataset was to investigate whether officers investigating cold or historic homicide/sexual offences would experience a framing effect, simply from knowing that a case was classified as 'cold' or 'historic'. As these officers are on a designated team to look at these cold cases, they already know what status their case is going to be prior to getting one allocated. Therefore, the frame of the word 'cold' itself which Roach (2017) discussed, potentially does not apply to this team of officers.

However, the research looked at how these cases are allocated and a subtheme of the framing effect was explored with regards to this. There are over 80 undetected murders and over 80 undetected sexual offences, including those jobs that have ended in acquittals in court, within this force area so there has to be a system in place to decide which cases get looked at before others. Although these officers were not specifically involved in this process, they did have some knowledge around the selection process:

"An individual came up with the matrix and had certain elements he was looking for in murders – age, sex, gender, availability of exhibits and things like that all came into his matrix."

“We’re now up to 80 odd murders – 83. And we need to start scoring again, and we’ve looked at the matrix we’ve used and it’s not really fit for purpose.”

Interviewee E, line 141 – 143; 145 – 146

“I think we’re trying to get a more scientific approach to find out what we have got and what we have a chance of achieving with the jobs really.”
“At the moment we’re looking at jobs that we are aware have got potential shall we say but I think everyone has identified it’s not right how we’re getting them all at the moment.”

Interviewee B, line 194 – 196; 197 – 199

“So if you had 2 or 3 cases that you got hits on at the same time, which doesn’t happen very often, but if it did, you would have to prioritise which one you felt was at greatest risk to the public.”

Interviewee D, 196 – 198

“So I suppose so the way we’re thinking of it is, is detection potential. Which is terrible isn’t it?”

Interviewee F, line 98 – 99

The research suggests that officers are allocated a case based on detection ability which they are all aware of. This is supported by the Murder Investigation Manual regarding the information profile mentioned previously. This could frame the officers in thinking that the case they are working on will end up in a successful detection of a suspect and secure a conviction which, in turn, could end up leaving the officer feeling very frustrated or inadequate at their job if they fail to progress the case. The feeling of being inadequate at their job could have a snowballing effect on the next jobs they investigate. De Dreu, Van Dierendonck and Dijkstra (2004) states as a result of prolonged stress in the workplace, individuals may start experiencing what they term as reduced personal accomplishment. This is where the individual starts to doubt their ability to make a difference and they start to feel that all the work they do is not of a good standard and that they’re incompetent at their job.

The framing effect is still evident during a cold or historic investigation but not as first assumed in that knowing the status of the case would frame officers into a certain thought process. However, it does still support research that states decision making is heavily influenced by how information is presented (De Martino, Kumaran and Seymour, 2006). It is suggested that the officers are framed into thinking it is likely they will complete their job which on the surface may not be a negative thing. In this sense, the drive to securing a conviction may result in every aspect of the case being re-looked at until it’s being exhausted, which may indeed result in a conviction of a suspect. However this could lead to over-working in order to try and secure the evidence to get a conviction. Research by Porter (1996) argues that working too much has a detriment to the well-being of the worker and individuals are more likely to develop coping mechanisms such

as alcoholism and experiencing many factors such as identity issues and denial. It is argued that these factors have a negative influence on decision making which could be detrimental within the role of these officers.

This finding opens up an opportunity to investigate the social construction of the police force and for the method in which they decide which cases should be prioritised to be analysed and improved. Research by Corsianos (2010) looked at how one police force prioritised crimes and what variables they used to do so. It was found that crimes that were considered as 'high profile' got more investigative attention than those crimes not considered as 'high profile'. This is similar to the cold or historic cases being deemed as more solvable getting reviewed as a priority over others.

Theme three: Evidential breakthroughs

Another theme that was identified from within the dataset which would affect the decisions made by investigators when looking at cold or historic criminal cases was what the development in forensic science could achieve.

This supported findings by Adkin and Roach (2015) in which forensic evidence would be what investigators deemed as the breakthrough evidence;

“First thing we like to know what forensic potential we’ve got. So I’d, after reading what actually happened, I’d want to know what forensic exhibits were available. That’s where we’d get a breakthrough, if anything. Especially with the advances.”

Interviewee C, line 24 – 26

Those officers that investigate cold or historic sex offences rely on the development of forensic science to be able to identify suspects; *“you’re completely led by the forensic science service...”*(Interviewee D, line 34). Research states that when the laws of retaining DNA first came into play in the USA, it was originally limited to sexual offenders purely due to the theory that these offenders were more likely to leave biological evidence behind and also more likely to go on to re-offend (Simoncelli, 2006).

Now, in more recent times, it is often standard practice to obtain biometric samples from suspects brought into police custody and the database which stores such evidence has expanded meaning there are far more possible samples to draw a comparison with than there once was;

“Because back in the day, where they weren’t able to detect these offences, because science didn’t allow them to, the force had to retain these items knowing that one day science will advance and detect these offences.”

“[DNA sample]...see if it links to a profile on the database. If it does, and we’ve got the review paperwork as well and we match it up, we start the case from scratch by building the case up.”

Interviewee D, line 33 – 34; 37 – 39; 54 – 55

It is a collective assumption that a breakthrough with DNA evidence would be the ideal evidence to uncover when reviewing a cold case. This supports research by Roach & Pease (2006) whom state that the reviewing of DNA evidence within a cold case review is considered and integral part of the process. Research by Briody (2004) regarding the effects of DNA evidence in Australian courts found that those cases out of 150 that provided DNA evidence were more likely to reach court in the first place. Those that presented incriminating DNA evidence had more of an influence on juries to convict guilty. Tully (1994) also found that DNA evidence increased the chances of a positive outcome at court, especially when the cases involved rape; as Interviewee Q stated *“Everyone loves forensic evidence, because it’s hard to argue with. You can’t beat a bit of science.”*(line 276 – 277).

However, the danger with this finding is that the investigators may experience forensic confirmation bias in that, if they get a forensic breakthrough, they don’t continue to explore other avenues which could potentially point away from that suspect. Also, they may fit the forensic evidence to support their already formulated hypothesis instead of taking the approach of trying to falsify what the evidence is suggesting in order to make sure they have the right suspect. This is supported by Kassin, Dror and Kukucka (2013) who state that the piece of forensic evidence may be correct but investigators may get the context surrounding that evidence incorrect. This suggests that not only can the promise of investigating a case with high forensic potential frame the investigator, they can also get blinded by the science and take the evidence as concrete which in turn would negatively affect the decisions they make.

Despite the majority of officers being in favour of DNA evidence, a discussion of the new science of DNA, known as DNA 17, highlighted further negatives to forensic science. Due to the advances in forensic science, when old samples are being retested, the investigators think they are getting a breakthrough however the results aren’t quite what they appear to be;

“But what we are finding is that we’re getting identifications on them and sometimes it’s the forensic scientist themselves whose DNA is appearing because techniques and preventative measures weren’t as good as they are.”

Interviewee E, line 52 - 54

This could be explained by the lack of understanding and potential contamination when forensic science first came into use. Practices that were done over 20 or 30 years ago have been developed and decontamination measures have been improved for the collection of recent samples. DNA – 17 is the latest profile of DNA to be used by the forensic science service and due to its improved sensitivity it has allowed a DNA profile to be extracted from small or poor quality samples which is why it is ideal within the cold case reviews as samples that a DNA profile couldn’t be obtained from years ago, may actually now produce a profile. The negative aspect of partial matches with DNA are still apparent with DNA – 17 despite its strength being able to obtain a profile from small samples, therefore, the DNA evidence is still not 100%. Unfortunately, as with any evidence, contamination is still a risk. However, with DNA – 17, contamination is more easily detected (Crown Prosecution Service, 2018)

There is research to suggest that DNA evidence should only be used in conjunction with other evidence and is almost considered as a last resort (Schroeder & White, 2003) which is further supported by the dataset in this research; *“I mean it’s not perfect, but it’s a great one to have. Then if you’ve got, er, witnesses and other evidence too, that DNA just sort of, cements it all together you know? So yeah, DNA I think.”* (Interviewee C, line 87 – 89). This may be because of the issues with forensic evidence. Research by Koehler (1993) found that DNA evidence can be exaggerated in the court room and may not be the ‘ideal’ evidence that it is deemed to be.

It is also argued that DNA is not concrete evidence. Errors within the testing do occur quite often and as a result false convictions have happened with innocent people spending time in jail (Council for Responsible Genetics, 2018). It is argued that DNA evidence and its advances should be something that is used by both the defence and prosecution whether it would assist or undermine the prosecution from a police point of view. It is there to assist in a fair trial, not to simply identify an offender (Roach & Pease, 2006).

Theme four: Pressures faced and their impact on decision making

Being a police investigator at any level is a pressured job and carries a lot of stress (Territo & Vetter, 1981) so it was unsurprising that pressures in the work place was a common theme arising from this dataset.

A high workload was one of the subthemes which emerged as a huge pressure felt by the officers investigating cold or historic homicides/sexual offences. This was because they felt like they should be able to focus on one case at a time to make sure the investigations are completed to their fullest potential;

“We’d like to focus on one case at a time but we’re not at the moment, we’re really busy. We’ve suddenly got an influx in cases. Erm, got about 8 cases running at the moment, ones that I’ve had to out files into and disclosure and prepare for court...”

Interviewee D, line 169 – 171

“Ideally, we’d have one. Move on to the next when we’ve finished. It’s fine when you’re waiting for something to come back on one case, so you make a start on the next. That’s quite normal in any job. But when you’re working on 3, 4, 5 at a time, it’s hard. You want to give your all to every single one. Not saying we don’t. Just resources I guess.”

Interviewee C, line 65 – 68

Unfortunately in the current climate of the UK, focusing on one case at a time is not a privilege these officers have. This is the harsh reality of the current resources available to the UK’s police forces which has a contributing effect to officer’s workloads. Travis (2017) reported the number of officers have been cut from British police forces since Theresa May has become is a staggering 21,500 and in 2010 it was agreed that the police budget would be cut by 18%. This is having a detrimental effect on the working officers as unfortunately,

crime has not decreased yet the number of officers has. Therefore workloads are on the increase.

The danger to have several cases to one officer is that the review is not carried out to its fullest potential meaning evidence could potentially be missed, meaning a suspect may carry on being undetected. There is existing research to suggest that high workloads would contribute to an individual experiencing exhaustion and ultimately a burn out and in turn, have a detrimental effect on work performance (Bakker, Demerouti and Verbeke, 2004). A further concern would be that if officers' workloads were that demanding, as their exhaustion levels increase, so would the level they engage with each case which would also have a negative impact on the decisions they make (Bakker, Demerouti and Verbeke, 2004).

The discussion around workload also brought a further subtheme to the surface; time. The research found that these reviews are extremely time consuming in themselves. As mentioned above, if officers were working one case at a time, the length of the review would not really become an issue. However, due to the workload, the pressure increases for officers to make sure they're doing what they can on the cases allocated to them:

*"Time consuming definitely springs to mind. It's locating the stuff, if it still exists and hasn't been disposed of or destroyed or languishing in some corner, which you find."
"That's the hardest part, knowing it's going to be a battle finding everything."*

Interviewee A, line 48 – 49; 50 – 51

*"Well it's a long process to be honest. The older you go the more boxes you tend to have."
"Anyway, the job I'm working on, I had 6 boxes, jam packed full of paper that I had to go through before I did anything else. You can't do anything without knowing what happened in the case itself."
"You kind of want to get as much as you can done as soon as possible and then you can hopefully help someone else by looking at their case. You want to offer as much as you can to the victim and their family so the more cases you can be reviewing the better. But you want to do a good job too. Don't want to rush it."*

Interviewee C, line 20; 21 – 23; 32 – 35

The explanation from the officers of what a review actually entails highlights how long a review can be and how much time needs to be dedicated to a review of a case. As a result of this, officers may offer to work longer hours or opt for overtime which can potentially add to the pressure of the job. Research by Ma et al. (2015) that officers that worked more afternoon or late shifts identified as more stressed. Over a long period of time, this stress could be detrimental not only to the officer but also the cases they're reviewing as mistakes are more likely to be made.

Moreover, time was also the main difference found between investigating a cold homicide/sexual offence as opposed to a live one which adds to the pressure of the job in a

different way. This supports findings by Adkin and Roach (2015) whom state time is the obvious difference between live and cold cases:

“The biggest and obvious one is time. That is the biggest thing. You are certainly under pressure with a live murder, particularly if you’ve got suspects. Because once they’re charged custody time limits kick in...”

Interviewee E, line 133 – 135

“The evidence is quickly collated, assessed and er, dealt with whether it’s a suspect or forensic work, it’s all these for you to find and deal with immediately. It’s not like that with a cold case, it’s all been previously done and it just takes time.”

Interviewee A, line 244 – 246

“And that’s the hardest part, is the time. As an officer on the case, once that murder happens, you’re off and running. Whereas these kind of work, nothing spoils if we do it tomorrow.”

Interviewee Q, line 231 - 233

Sewell (1994) states there is great pressure and stress on homicide detectives mainly due to the exposure to death and violence. He states the burden of their great responsibilities really ignites the pressure they feel which goes hand in hand with tiredness of overworking. This is supported by this dataset. Also, the frustration with the court system and other partner agency contributes to the pressures they feel. It is explained that most pressures for police officers come from the imbalance between what is required for them on a job and what they’re actually capable of giving in that situation, with a constant reminder that if they fail to do something either at all, or just correctly, the consequences are so dire (Hunnur & Bagali, 2014). Therefore, when the officers in this research explain the tight time scale for a live homicide investigation, the pressure for them to perform is increased as they are aware of the consequences if they fail to perform above and beyond.

This isn’t to say that the pressure of time is not something that affects officers whilst investigating a cold or historic homicide/sexual offence, and the data collected reflects this. However, the pressure of time is in a slightly different context and affects officers differently when investigating a cold or historic homicide/sexual offence. They are aware certain aspects of the investigation don’t need to be done that second, whereas in a live investigation they do. But as the reviews are so time consuming and they’ve often got 2 or more on their job list, time does still remain a pressuring factor and could result in some investigatory leads being neglected.

A further potential pressure that arose from the data was one considered prior to the research; previous reviews by notorious detectives. It was a consideration that if officers were allocated a case that was previously looked at by a detective which was considered to have a ‘good track record’ when it came to solving crimes, whom had had no joy with the cold case, would it affect their work? Roach (2017) argues that this is one factor that may

affect the investigator's confidence in solving the case as it's likely to decrease their confidence level.

Suder (n.d) wrote career advice of the detriment of comparing ourselves to our work colleagues. She states it is a natural human behaviour to compare ourselves to our fellow workers which is actually quite healthy, however, just because a co-worker is regarded as successful, it doesn't detract from our own success. It may be intimidating following in the footsteps of a co-worker with a great reputation but that doesn't mean there is less work to be done.

It could also be considered that knowing or realising which officers had previously reviewed the case prior to the officer starting their own review could have a framing effect on the decision they go on to make. As Roach (2017) states, the officer's confidence may be knocked and due to comparing themselves to the previous officer, they may unconsciously decide from the offset that they have no chance solving this cold or historic homicide/sexual offence.

When asked a scenario based question regarding this, all officers were of the same shared opinion; it wouldn't make a difference to them who had looked at their case previously. If it was still undetected then that was the main concern. In some cases that was down to the fault of the original investigation, however, the main reason the cases remain undetected, is purely because of the information available to the investigating officer at that time:

"Erm...No, I wouldn't because despite them being a very good detective, they can only do what was available to them at the time."

Interviewee D, line 251 – 252

"Whoever has done it in the past, it doesn't matter, you look at what you've got, er, and assess what you've got to go forward and it makes no difference whose looked at it in the past."

Interviewee B, line 255 – 257

"Obviously you respect your colleagues who have previously investigated it but I wouldn't let it colour my views on what I should be doing."

Interviewee A, line 334 – 335

"No not at all. Sometimes you find that whatever they did back in the day was a sham anyway. That they missed loads of things and focused their investigation a little wrongly. So it wouldn't affect my work. I'd start again regardless who had looked at it before me."

Interviewee C, line 120 – 122

“I’ve looked at jobs that have been reviewed by SIOs who you think ‘wow’ and then others who have a track record of undetected murders. But when you look at the case, you understand why it was undetected.”

Interviewee E, line 208 – 210

It is clear that the officers review each of the cases with the same amount of professionalism and, with a fresh pair of eyes despite which officers may have previously looked at it. This follows suit with the high expectations of the police service (Sklansky, 2014). Therefore, what was first considered to be a potential pressure, and a potential frame for the decisions officer’s make, a negative effect of following in a great detective’s shoes is not supported by the data.

Discussion

This chapter discusses the findings of this piece of research. Firstly each theme found from the analysis will be discussed with the research aims in mind, incorporating current research that has been previously discussed during the thesis.

Definitions of what makes a cold case and what makes a historic case will be provided, building on the working definitions used and any differences found between them will be addressed.

Possible bias affecting the decisions made during cold case or historic case investigations will also be discussed and whether some biases only present in certain case types. In particular, the framing effect will be explored in relation to officer's knowing the case status prior to making any investigatory decisions.

The implications and the limitations of the research will also be discussed as well as recommendations for further research within this area.

Key findings and implications

Theme one: Lack of clarity in definitions

The research showed that officers have different opinions of what a cold case is and what a historic case is; whether they are different or the same thing, and whether decisions investigators make on them differ. It was evident that there was a clear lack of clarity defining these case types. This supports findings by Walton (2006) who states that investigators are very conflicted regarding the term 'cold' as it tends to suggest that these cases are unsolvable and that no one is looking into them. It was found that officers were more comfortable with the term 'historic' and would refer to cold cases either as 'historic undetected crimes' or just 'undetected crimes'. This term would be the umbrella term which defines both cold and historic homicide/sexual offences. This finding would suggest that 'cold' cases and 'historic' cases are the same, with no aspects separating the two.

Despite it not being a majority opinion shared by all the officers, some of them did feel there were differences between what a cold case is and what a historic case is. One officer argued that the statistical classification of crimes within the force would be incorrect as if the term 'undetected' was only used then all the homicides and sexual offences that did make it to court and the suspect got acquitted would not be added to the list for the team to re-investigate. This would mean victims may not get justice and closure if the terminology was not correct. Campbell (2008) states that the psychological trauma of rape victims is severe as it is due to the actual incident, they don't then need letting down by the police, legal system, medical services, etc.

A further point made from the research was that in a cold case investigation, homicide or sexual, they often have a victim/body which is often identified quite quickly. However, it was stated in the research the difference with a historic job is that there doesn't have to be a victim. The example given in the data was a historical allegation of child exploitation and the officer states that they started an investigation into child exploitation in a certain geographical area without actually having any complaints from victims. They sought out

possible and potential victims to see if a crime had taken place or not. This is why this officer deemed the two completely different.

The final contributor was time; it was described that “10 years down the line” would be considered as a historical investigation. However, an investigation would be deemed “cold” once all the lines of enquiry had been pursued, and the length of time that has passed would not be a factor when deciding if a case is cold or not.

Therefore, the research presented us with clear definitions of the case types;

- A cold homicide/sexual offence is a case in which officers have a victim, have pursued all appropriate lines of enquiry at that time and have no suspects or leads. Therefore leaving it undetected with a hope new evidence may come to light further down the line.
- A historic homicide/sexual offence is a case in which officers, often have no victim or are unaware of any victims, and the crime happened over 10 years ago but has only come to police attention in recent times. If officers have a victim, it is also likely they will have a suspect and just need evidence to prove the alleged offence.

Both case types would be considered a ‘live’ investigation if new evidence was discovered.

This provides a clear definition for the lay person and for the police investigators which is something that previous research in this area had not provided. This will allow for the public to understand what kind of crime is being investigated and it will also help the investigator understand what crime they will be dealing with. As there is a suggestion that cold and historic crimes are different, it could suggest that a specific team should be investigating each type of case instead of there being a ‘cold case review team’ which currently looks at both, as the classification would suggest they are only investigating ‘cold’ cases.

Theme two: Potential bias affecting decision making

It is evident from this research that some bias does exist still within decisions made in a cold case. The officers stated that although they do feel emotion, as it’s a normal human reaction, they do not let their emotions have an impact on what decision they make; so emotional bias is not something that impacts their decisions. They do state that it’s more common to be emotionally involved on a live homicide or sexual offence, due to being immersed in the emotions of the victim’s family and the witnesses. This research offers a reassurance to police forces in that officers are aware they may feel certain things whilst investigating a case, however they do not let that cloud their investigative judgement (Brown & Daus, 2015). On the contrary, research conducted by Roach et al (2018) regarding cognitive and emotional stressors of child homicide investigations found that all of the investigators that were interviewed, both from the UK and Denmark, felt there was a fine line between showing empathy for the family and becoming too emotionally involved and potentially having their judgement clouded. One officer went on to state that when homicides involve such a vulnerable victim, such as a child, it becomes more difficult to

know the professional boundaries and remaining completely objective is harder. One would assume that even if the case was cold or historic, if the victim was a child, officers would feel more emotion. Despite this finding, it was also clear from the research that investigators were mindful they should handle such cases sensitively but not to forget they're there to find a suspect and often with homicides, especially with child victims, the family are the main suspects. Therefore, they cannot afford to let their emotions hinder the investigation, otherwise a guilty suspect may walk free.

It was believed that tunnel vision would be a specific bias that does effect decisions made when investigating cold or historic homicide/sexual offences. However, the research found that due to the extensive review process cold case officers undertake, it would be very difficult for them to be subjected to tunnel vision as they review every piece of evidence available to them. It was suggested by officers that tunnel vision is something that would happen during a live investigation rather than a cold case review and it's easy for a reviewing officer to pick up on the bias from the original investigation when they review what has been done and what hasn't been done. For example, failing to keep an open mind at the time and making sure all reasonable enquiries were carried out; like in the example given by the officer. It was again highlighted that cold case review officers are well aware they must keep an open mind throughout their investigation.

On the other hand, the research showed that confirmation bias is still evident in the decisions cold case review officers make. As Roach (2017) stated, investigators of cold cases are potentially influenced and governed by the decisions made in either the original investigation or the previous reviews. It was found that in some of the cases the officers' were reviewing, they were still continuing down the same investigative path as the original investigation and hoping a DNA breakthrough would get them a conviction. For example, the case in which interviewee B spoke about. This is not only conflicting to the previous point made that cold case investigators must keep an open mind and they are aware of this but it also suggests tunnel vision is still present when investigating cold or historic cases. However, due to other contributing factors such as time and workload, it may be quicker and easier to follow the previous investigative thoughts than re-starting the entire investigation from scratch and just hope the advances in DNA will help secure a possible suspect. Nonetheless, it is important investigators don't rely on the developments of forensic science and still complete their review as they would if they had worked on the case when it happened.

It is possible that the investigators did start their review from scratch and disregarded the previous hypothesis from other reviews and simply followed the evidence finding themselves arriving at the same conclusion that had been previously suggested.

The hypothesis that officer's would be framed purely by the term 'cold' (Roach 2017) is one that the research did not support. Officers' knew they were being a part of a review team so knew they would only be investigating cases that were classified at 'cold' so therefore would not be framed in a specific way when been allocated a case. That however, does not mean the framing effect does not come into play during cold case investigations.

The research suggested that officers may be framed due to knowing how the cases are selected for allocation; solvability potential. The process of deciding which cases would be

looked at was discussed and it was evident that officers were aware they were selected based on how likely it would be that it may result in a conviction. Therefore, officers know when they receive a case that it has been deemed as 'potentially solvable'. This could then have a negative effect if they do not manage to solve the case. It could impact on investigator confidence which Roach (2017) argues is one of the main causes of investigators making ill-informed decisions. This suggests that when officers start being allocated cases deemed 'harder/less likely to be solved' that the decisions they make in the investigation may be influenced; for example, not spending as much time exploring leads due to already been informed it's unlikely going to be solved.

Nevertheless, this frame could have a positive effect on investigators; it may drive them to re-look at every inch of the case in order to achieve a successful conviction rather than giving up prematurely, accepting it wasn't solvable. They may want to attempt to prove their investigative skills to their supervisors and colleagues.

Theme three: Evidential breakthroughs

As mentioned briefly above, the research found that the investigators favoured forensic evidence when asked what ideal new evidence they would like when investigating a job. They state that they have a forensic scientist assigned to them to help them assess the forensic potential in a job. After getting an understanding of what happened in the crime, the first thing that is looked at is what evidence may give a forensic breakthrough. It is of the opinion that forensic evidence is difficult to dispute within a case and research suggests if forensic evidence is presented a court, it's more likely to secure a conviction (Tully, 1994). With the advances in technology and the development of DNA 17, the view of officers is that forensic evidence is fast becoming the most accurate piece of evidence (Crown Prosecution Service, 2018). However, research by Kassin, Dror and Kukucka (2013) argue that DNA evidence is subject to its own confirmation bias in which as soon as officers get confirmation someone's DNA is in a crime scene, they then look to gather evidence supporting their guilt. So although it tends to be viewed as the most ideal evidence, it is still subject to bias which can then affect the decisions made by the investigators. Investigators need to be aware that forensic evidence is to assist in a fair trial and not there to identify a suspect and allow for easier prosecution (Roach and Pease, 2006).

Theme four: Pressures faced and their impact on decision making

The research found that, like all roles within policing, workload was a factor which added pressure to the officers. Due to the recent cuts in policing (Travis, 2017), resources are thin across the ground. Although this team of officers are dedicated to reviewing cold cases, it is also possible that these officers would be drafted in to live jobs if the force needed more investigators, especially those with as much experience this team have.

The officers stated that it was typical for them to be reviewing more than one case at a time, often 2 or 3. They highlighted that as sometimes the results for certain things can take a while to come back e.g forensics, they have no issues in starting to look at another case. However, the danger to having several cases on one person's workload, is that each case does not get given the same amount to time and attention. Officers may make decisions in a

rush and not consider all their possible options. Research by Maule, Hockey and Bdzola (2000) found that participants whom had a time limit to complete a complex problem displayed more anxiety and energetic and were more likely to make risky decisions. Which in the case of these officers, could end up leaving a suspect free.

An additional pressure that came out in the dataset along with workload was the pressure of time, supporting previous research by Adkin and Roach (2015). Officers in the dataset stated how time consuming a cold case review can be, especially the older the case. They believe this is due to the advances in policing again. For example, 20 years ago, the computer systems that are used now were not available meaning most investigations were paper based. Therefore, some cold cases come with 6 boxes of papers that all need reading and looking at before it's possible to even have an idea as to what actually happened. They also state that on the whole, storage of evidence has not been great over the years meaning some evidence has been lost which quite obviously does not help the reviewing officers. This could result in officers working longer hours in order to get through as case, especially if they have a high workload. Research has found that working longer hours contributed to stress (Ma et al. 2015) which in turn, had a negative effect on decision making (Starcke and Brand, 2012). The research also suggested that time is an aspect which adds a different kind of pressure on officers when they investigate a live case which supports Roach and Adkin (2015) who state the main difference between a live case and a 'cold' case is time. The timescale for enquiries to be carried out during a live investigation is extremely tight; officers have the Golden hour to collect what often ends up being the key evidence (Core Investigative Doctrine) which adds massive pressure to the officers as they are aware of the possibly consequences if they don't perform. Whereas those investigating a cold or historic offence have the privilege of being able to take their time with the enquiries.

A final pressure that was discussed was that of the previous reviews. It was hypothesised that officers may make different decisions on a case if they knew a prestigious detective whom has a successful track record of solving cases could not manage to solve the case they had been given. It's suggested it would have a negative impact on their confidence of solving to case (Roach, 2017) and could also potentially have a framing effect on the officers. If they knew what the detective had done previously before starting any enquiries themselves, they may not actually start with fresh eyes. However, the dataset found that this would not have any effect on the investigators. It was stated that officers would respect their fellow colleagues' work but it would not make them approach the job any differently.

Limitations

The main limitation to the research was the sample size; 7 participants took part in the research. However, this was due to the concise criteria and required expertise that the participants needed to have in order to take part. There are not many people that have between 20-30 years' experience working in the police force, investigating a range of crimes, including homicide and sexual offences, whom have also have experience reviewing cold case homicide/sexual offences. So although the sample size was small, it was fairly representative of the target population.

A second limitation is that the officers were all from the same force in the same regional area. Due to time constraints it was impossible to travel to every police force within the region and interview a handful of officers who review cold and historic homicide/sexual offence cases. Therefore, the results from this research can be generalised to represent the thoughts of officers within this force and region, but other force areas would need to be researched in order for the data to be fully representative of police forces in the UK.

Although these points are fair limitations of the data, research suggests that small sample sizes offer the ability for data to be collected in a relatively short time frame and it is more cost effective, with a view to further studies being on a larger scale in the future knowing that resources would be well spent (Hackshaw, 2008). Therefore, although the sample was small and restricted to one police force, the study was conducted in a small time frame and was also cost effective. It is a foundation for further research within the area.

A third limitation would be that the sample was not an even split of men and woman to allow for more representative data. However, traditionally, the police force was a male dominated workplace and as the cold case review team are made up of retired officers with relevant experience, it could account for why there are more males on the team than females. Therefore, the sample is actually representative of the target population. Research by Prokos and Padavic (2002) found that masculinity is prominent in the police force and observing new recruits found the men excluded the women and also highlighted the differences between them. This supports the concept that the police force is quite male dominated which could account for this limitation.

Implications of the research

There is not much research in the field of psychology about cold cases and there is virtually none on historic cases. Therefore this research attempts to bridge the gap and provide an understanding of the process of investigating a cold and historic homicide/sexual offence and what possible factors could affect or influence their decisions and how this could impact the criminal investigation.

Despite its limitations, the research does provide answers to the aims set at the start. A definition was provided of cold and historic cases which attempted to highlight what the differences were between them. This can help guide investigators and officers whom classify crimes. It will also allow for the National Crime Statistics to report a more accurate picture of the crimes within the UK. Furthermore, it will help officers have a slight understanding of the case they are investigating from the off-set; if historic means potentially no victim and happened over 10 years ago, they have an idea of what they might be working with. Similarly, if they are given a cold case which means they are likely to have a victim but all lines of enquiry have been exhausted already.

The research highlights that cognitive bias does still happen during criminal investigations despite the status of the case. Therefore, more adequate training can be developed for investigators for them to be aware of these possible biases and how to combat them. The training should be ongoing throughout their careers and not just something that is provided

when they first join the force to make sure investigators are constantly reminded their decisions can be subject to bias.

The research also provides evidence of the impact the recent police cuts have had on the police force. This therefore could highlight the strain that the force are under and would benefit from further funding and further training.

Recommendations for further research

Advice for future research would be to have a larger sample size and have participants from other police forces to be able to compare opinions across the region. A bigger sample size would allow for a more reliable definition of both cold and historic cases to be constructed and to confirm whether there is a need to classify these crimes differently. As this research did elude to the crimes being different, there is possible research into the view of having two separated teams dedicated to investigating them rather than one cold case review team. Further research solely concentrating on the differences between cold and historic cases would also be useful in order to obtain a clear understanding of what actually classifies as cold and what classifies as historic.

A further advance would be to include research of officers investigating live homicide/sexual offences to see whether there is a difference in the cognitive bias that could possibly affect decisions made as the research suggested. However, without having a comparison, the research isn't validated. Similarly, there is room to compare decisions made by investigators based on the type of offence; this wasn't of concern to the current research and for its purpose, it was assumed all offences would be investigated exactly the same however this may not be the case and would need further exploration.

As these officers were all recently retired from the force, further research could investigate whether the length of time retired out of the warranted officer role has an effect on the bias of decisions made. It may be that the longer the officer has been out of working in the policing environment that they are susceptible to more bias when they return. Especially if further training is not provided when they re-join. There is research to suggest that retirement does have a negative impact on cognitive functions of an individual (Bonsang, Adam and Perelman, 2012).

Future research could also encompass a quantitative measure in which investigators are exposed to research in an experimental environment in order to investigate whether what officers believe they are doing during an investigation, they would actually do in practice. Each experiment could be focused completely on one type of bias in order to investigate whether one particular bias is more prominent during a cold case investigation or whether one doesn't exist at all, like this research suggested.

It is evident that there are many more research ideas to come from this topic and a need for further investigation in order to achieve any positive differences for officers investigating cold/historic homicides or sexual offences. However, this research is an adequate grounding for future research.

Conclusion

Overall, the current research did offer answers to the research aims set out at the onset. Prior to this research, there were no firm definitions of historic or cold cases and after conducting this research, definitions of what makes a case historic or cold have been identified. However despite being able to offer definitions of the two crime types from part of the data, the majority of the participants had the opinion that a cold and historic case is that of the same thing which in turn suggested there would be no difference in the decision making process between the two case types.

On the contrary, it was evident that the decision making process for criminal investigations was affected by slightly different biases and pressures, with more investigative aids available for live investigations. Nonetheless, the aims of an investigation remains the same regardless of the status of the case. The investigators should be following all possible investigative leads, gathering all evidence available to them, and aiming to identify and prosecute the individual responsible.

In relation to the second theme which aimed to explore the cognitive bias in the different case types, it was evident from the research that tunnel vision is a bias that is more likely to affect a live investigation whereas confirmation bias was prevalent in all three case types. This was further supported by the participants identifying a DNA breakthrough would be the ideal new evidence when investigating a cold case which can also be subject to confirmation bias. The dataset also found that emotional bias was something which would potentially have more of an effect on a live investigation rather than a cold or historic one, should it have any impact at all.

Further themes that came out of the research were not accounted for in the initial research aims; pressures faced and the impact they could have on the decisions made. It was found that officer's workloads could have a negative impact on the decisions made which was something that wasn't considered prior to data collection. Time was a pressure associated more with live investigations rather than cold or historic ones; everything has to be conducted expeditiously during a live investigations and could have massive consequences if not.

The hypothesis that the investigating officer may have their decisions framed by knowing what type of case they would be investigating wasn't supported by the research. On the contrary the research offered another aspect which may frame the investigators decisions; the potential solvability of the cold or historic case. It was identified these were allocated based on how likely they would be to be solved which could frame the officers when they start their investigations and impact negatively if they cannot solve it, in turn knocking their confidence which previous research has attributed to making ill-informed decisions. This has opened the door to further potential research topics.

Finally, the hypothesis that officers may be framed by knowing a prestigious detective couldn't solve the case previous to them and would, from the onset, believe they had no chance solving the case if that detective before them couldn't was not supported by the dataset. They officers would still conduct their review as expected despite whom may have investigated previous to them.

This research has made a start to bridge the gap in the existing research and is a foundation for research in the future.

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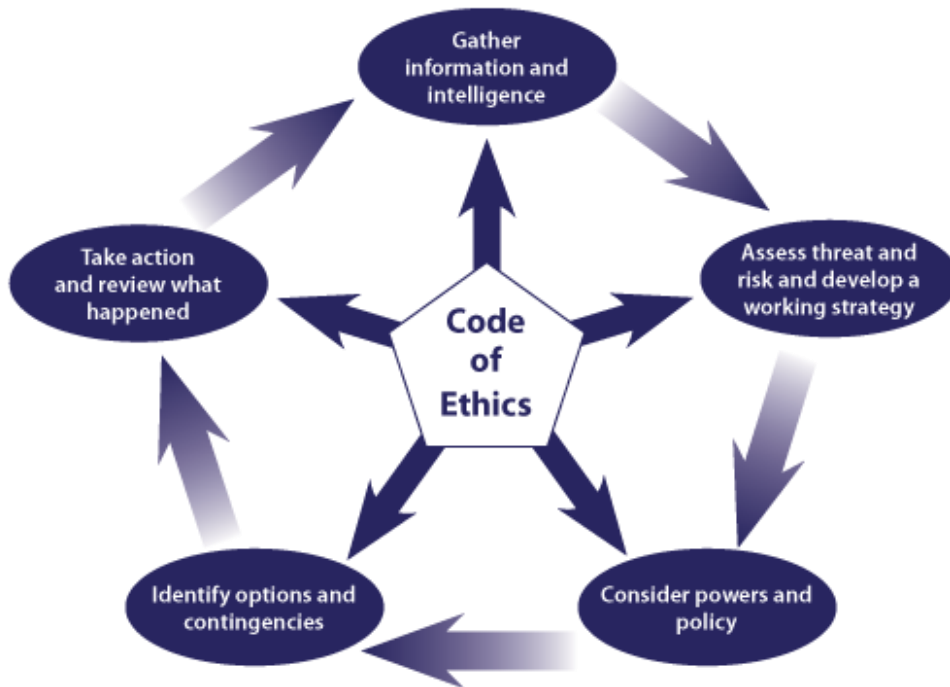
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Appendices

Appendix 1 – National Decision Model (College of Policing 2014)



Appendix Two – Interview Guide

Interview Guide

- 1) What is your first initial thought when you hear the term ‘cold homicide/sexual offence case’?
- 2) What is your first initial thought when you hear the term ‘historic investigation/historic homicide/sexual offence’?
- 3) Can you please explain the process of investigating a cold case?
 - What do you think a ‘review’ should be?
 - What do you think a ‘review’ actually ends up being?
 - Why do you think this?
- 4) Tell me about a cold case you have investigated.
 - How many times do you think this case has been investigated before you?
 - What decisions did you make?
 - Why do you think you made those decisions?
 - Did anything else influence your choices?
 - What was your workload like at the time of investigating?
- 5) What are the differences between investigating a live homicide/sexual offence and a cold homicide/sexual offence?
- 6) How likely do you think it is that emotions can affect the decisions you make?
- 7) How do you decide which cold case gets priority over another?
- 8) In an ideal world, what new evidence (witness, DNA/Fingerprints, body, etc) would you want when taking on a cold case? Why?

I am just going to put some scenarios to you now...

- Let’s say there were two cold homicide/sexual offence cases, one which was committed in 1998 and one committed in 2005, which one do you think you would be more confident investigating? Why?
- Again, you’re faced with two cold homicide/sexual offence cases, one with massive media coverage and the other without, which one do you think you would be more confident investigating? Why?
- Let’s say you were investigating a cold case and before you start, you see the names of the investigators who looked at the case previously and you recognise one to be a very good detective who has a great track records solving the cases they look into. How do you think this would affect your review of the case? Would you do anything differently?

Appendix Three – Screen shot of the information sheet given to participants to show the layout.

Version 1 (15/04/2017)

University of
HUDDERSFIELD

Investigating Cold and Historic Homicide and Sexual Offence Cases

By Beth Hopps

I am a research master's student at Huddersfield University and am interested in the thought processes involved when officers investigate cold and historic homicide/sexual offence cases.

This research aims to provide information to the Police Force in order to assist these types of investigations.

If I could please ask you to spare approximately 30 minutes of your time just to answer a few questions about investigations you have been a part of.

All research is covered under the British Psychological Society (2014) Code of Human Research Ethics and is conducted within the normal business model for Policing, namely a guarantee of total confidentiality that is limited only either by your prior agreement or by the limited guarantee given by your Force.

All data will be completely confidential and it will all be anonymised in the write up, you would only be referred to using a letter. You will be offered the opportunity to read your interview transcript once it's been written up, instructions on how to go about this will be provided at the end of the interview. You will not have to answer any questions you don't wish to and you have the right to withdraw from the interview at any point.

You will also be able to withdraw from the research for 6 weeks after your interview. You can contact me using the emails below and I will remove your data.

I will be asking about real life cases you have worked on, so if you do feel uncomfortable at any point, please let know and please do not use any examples of cases you found emotionally difficult.

If anything you talk to me about later affects you, please also contact me and I will make contact with your Inspector to make sure you get any support you need.

Thank you for your time.

Contact details:

Beth Hopps

Work Email: beth.hopps@westyorkshire.pnn.police.uk

University Email: Bethany.Hopps@hud.ac.uk

Dr Jason Roach (Supervisor)

University Email: j.roach@hud.ac.uk

Tel: 01484 473842

Appendix Three A – Actual wording of the information sheet given to participants.

**Investigating Cold and Historic Homicide and Sexual Offence Cases
By Beth Hopps**

I am a research master's student at Huddersfield University and am interested in the thought processes involved when officers investigate cold and historic homicide/sexual offence cases.

This research aims to provide information to the Police Force in order to assist these types of investigations.

If I could please ask you to spare approximately 30 minutes of your time just to answer a few questions about investigations you have been a part of.

All research is covered under the British Psychological Society (2014) Code of Human Research Ethics and is conducted within the normal business model for Policing, namely a guarantee of total confidentiality that is limited only either by your prior agreement or by the limited guarantee given by your Force.

All data will be completely confidential and it will all be anonymised in the write up, you would only be referred to using a letter. You will be offered the opportunity to read your interview transcript once it's been written up, instructions on how to go about this will be provided at the end of the interview. You will not have to answer any questions you don't wish to and you have the right to withdraw from the interview at any point.

You will also be able to withdraw from the research for 6 weeks after your interview. You can contact me using the emails below and I will remove your data.

I will be asking about real life cases you have worked on, so if you do feel uncomfortable at any point, please let know and please do not use any examples of cases you found emotionally difficult.

If anything you talk to me about later affects you, please also contact me and I will make contact with your Inspector to make sure you get any support you need.

Thank you for your time.

Contact details:

Beth Hopps

Work Email: beth.hopps@westyorkshire.pnn.police.uk

University Email: Bethany.Hopps@hud.ac.uk

Dr Jason Roach (Supervisor)

University Email: j.roach@hud.ac.uk

Tel: 01484 473842

Appendix Four – Screenshot of consent form given to participants to show the layout

Version 1 (15/04/2017)

University of
HUDDERSFIELD

Investigating Cold and Historic Homicide Cases
By Beth Hopps

Participant Consent Form

Name: _____ Collar Number: _____

Rank: _____ Years' Service: _____

After reading the information sheet provided;

I confirm that I give researcher, Beth Hopps, permission to record my interview about investigating cold and historic homicide cases.

I also give permission for my opinions and thoughts to be used within this research, including direct quotes, in order to provide a better understanding of investigating these types of cases.

I understand the aim of this research and will provide as much information I possibly can.

I understand that all the data will be anonymous and my name/collar number will not be used within the research.

I understand that I can decide to withdraw at any point during the interview and also can withdraw my data up to 6 weeks after my interview.

I understand if anything I speak about during my interview causes me any distress that I must contact Beth as soon as possible.

I give permission for my data to be used within this research that could potentially get published within a research journal.

Signed _____ Date _____

Appendix Four A – Actual wording of the consent form given to participants

**Investigating Cold and Historic Homicide Cases
By Beth Hopps**

Participant Consent Form

Name:

Collar Number:

Rank:

Years' Service:

After reading the information sheet provided;

I confirm that I give researcher, Beth Hopps, permission to record my interview about investigating cold and historic homicide cases.

I also give permission for my opinions and thoughts to be used within this research, including direct quotes, in order to provide a better understanding of investigating these types of cases.

I understand the aim of this research and will provide as much information I possibly can.

I understand that all the data will be anonymous and my name/collar number will not be used within the research.

I understand that I can decide to withdraw at any point during the interview and also can withdraw my data up to 6 weeks after my interview.

I understand if anything I speak about during my interview causes me any distress that I must contact Beth as soon as possible.

I give permission for my data to be used within this research that could potentially get published within a research journal.

Signed _____

Date _____

Appendix Five – Screenshot of the debrief sheet given to participants after the interview to show the layout.

Version 1 (15/04/2017)

University of
HUDDERSFIELD

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Investigating Cold and Historic Homicide and Sexual Offence Cases
By Beth Hopps

Thank you for taking part in my research! Your data will be known as letter _____.

As mentioned previously, you have the option to read your interview transcript back once it has been written up. This is in case there is anything that, upon reflection, you do not wish to be included in the published research. If you would like to do this, please email myself using either of the email addresses below.

You also have the option to withdraw your data up to 6 weeks after your interview if you decide you do not want to participate in the research anymore. If you wish to do this, please email myself and state the letter you have been allocated. I will then take all the data out that you provided.

If anything that we have spoken about in your interview has caused you any distress or brought back any memories of a difficult case, please email and I will liaise with your Inspector to make sure you get appropriate support.

Once my research is finished, I will circulate it so you can read the finished paper.

Thank you again for your time, it is greatly appreciated!

Contact details:
Beth Hopps
Work Email: beth.hopps@westyorkshire.pnn.police.uk
University Email: Bethany.Hopps@hud.ac.uk

Dr Jason Roach (Supervisor)
University Email: j.roach@hud.ac.uk
Tel: 01484 473842

Appendix Five A – Actual wording of the debrief sheet given to participants.

**Investigating Cold and Historic Homicide and Sexual Offence Cases
By Beth Hopps**

Thank you for taking part in my research! Your data will be known as letter _____.

As mentioned previously, you have the option to read your interview transcript back once it has been written up. This is in case there is anything that, upon reflection, you do not wish to be included in the published research. If you would like to do this, please email myself using either of the email addresses below.

You also have the option to withdraw your data up to 6 weeks after your interview if you decide you do not want to participate in the research anymore. If you wish to do this, please email myself and state the letter you have been allocated. I will then take all the data out that you provided.

If anything that we have spoken about in your interview has caused you any distress or brought back any memories of a difficult case, please email and I will liaise with your Inspector to make sure you get appropriate support.

Once my research is finished, I will circulate it so you can read the finished paper.

Thank you again for your time, it is greatly appreciated!

Contact details:

Beth Hopps

Work Email: beth.hopps@westyorkshire.pnn.police.uk

University Email: Bethany.Hopps@hud.ac.uk

Dr Jason Roach (Supervisor)

University Email: j.roach@hud.ac.uk

Tel: 01484 473842

Appendix Six – Signed consent from the police force that was interview (force name edited out)

Version 2 (20/04/2017)

University of
HUDDERSFIELD

Investigating Cold and Historic Homicide Cases

By Beth Hopps

After reading the information sheet provided, I confirm that I give permission for Beth Hopps to contact investigating officers working within the HMET team at [REDACTED] in order to conduct interviews about investigating cold and historic homicide cases.

Name: Pawley C

Rank: D.C. Supt

Signed: [Signature]

Date: 26/04/17

Appendix Seven – Interview A

Firstly, would you be able to tell me about yourself; your service with the force and how long you've been with this current department.

Okay, yeah. I am a retired police officer and I did over 30 years as a police officer. I was, er, towards the latter stages of my career. I was, er, detective. In fact probably half of my career was spent as a detective constable and the last seven or eight years I worked on the Homicide Major Enquiry Team as a detective constable dealing with the more serious end of stuff, including murders and abductions, stranger rapes, that kind of offence. So that was my background as a police officer. Then I retired as a police officer in 2012, had some time out and then I think it was 2015, beginning of, I came back as an Investigative Officer not in this department and then after about 6 months, I transferred. So it's coming up 2 years now, transferred back to the protective services crime for this particular role of cold case reviewing. The old undetected murders which interested me because obviously I've worked on murder investigations before and I thought that was er, an area that I certainly would be able to contribute towards. So I've been back here for just under 2 years, reviewing undetected murders. Or in my case, an undetected murder; so I've worked on the same case for the last 2 years. So it's had a spin off, it's not just one particular case I'm working on. It started off as an investigation into the death of this young woman but then it erm, it spread out a little because one of the suspects involved in this case then came under scrutiny himself, so we then started to look at him. So it's been a bit of a knock on effect. And we're still working on it. Still work to be done.

What is your first initial thought when you hear the term 'cold homicide/sexual offence case'?

Well it's difficult to get your head round it in an hour or two. First of all you've got to see what's actually available to you, either documents wise or evidence wise. In my experience, I was quite fortunate that er, most of it was contained in four boxes. But not in any particular order. So it takes a few weeks to get your head around a case. The most important documents are usually the reports the Senior Investigating Officer (SIO) at the time, and if you're lucky, you'll have some sort of a summary of the case and reviews. So if you find, as a say, if you're lucky enough to find the previous report by the SIO and the reviews they did it will give you a bit of a flavour as to what the case is all about and how it was resolved. Because obviously, there's always a start, a middle bit and an end, there should really, at some point, erm, have some sort of final report on how the case has been resolved or not and any sort of recommendations for any future reviews. But because we've started looking at them again in a bit of a more organised way a lot of these cases, haven't been reviewed for a number of years. So we're having to start at the beginning with them and so, as I say, it's a long process at the beginning to sort of get your head around it. It depends what's available to you. You might have a big box and a load of paper work, all jumbled up, and it's about putting it in some sort of order so you can read the policy, the SIO policy – how it all started and then obviously there's reams and reams of documents, how the investigation progressed during the months or in some cases over a year or more, and then obviously some sort of final report. And that will give you a flavour of the actual case. Then it's a case of looking at the various areas you'll be reviewing like the forensic side of things, suspect side of things, witnesses, you know, you look at absolutely every single document so by the time you've finished reading you'll probably be the most knowledgeable

person on that case because, if you can think about it, er, going back 15/20 years somebody might have worked on the case from start to finish but they won't have read every single document. Whereas a reviewing officer, we read every statement, we read every action, we look at every message, we look at every forensic submission that's been made. So you do get a very good overall picture of what actually happened on that case. There's no sort of like quick fix really when you do start off on these enquiries. Time consuming definitely springs to mind. It's locating the stuff, if it still exists and hasn't been disposed of or destroyed or languishing in some corner, which you do find. Like in my particular case, we thought stuff was lost and months later it turns up in a corner somewhere. That's the hardest part, knowing it's going to be a battle finding everything. But I was lucky in my case, the main part of it, was all boxed up in these four boxes which had been located in storage.

You may not have had experience in these, but similarly, what is your initial thought when you hear the term historic homicide/sexual offence investigation?

Well I've worked on historic CSE (Child Sexual Exploitation) when I was at safeguarding. Difference wise, well in my particular case, the historic investigation that we were conducting with CSE, we hadn't got a complaint in the first place so we were investigating which hadn't been erm, complained about. We were trying to ascertain whether we had a particular problem in an area of the force and we were trying to trace potential victims. So that was a historic investigation into potential child sex exploitation. The obvious main difference in that kind of investigation is we're trying to find a victim to see whether we do have a case to investigate. Whereas in the cold case murders, we know we've got a victim because this person was killed 20/30 years ago and all the evidence that was collected back then is there for us to try and find; either in some box hidden away or some forensic material in the archives. Whereas with the historic cases, as I say, the one that I was involved with, we didn't have that as a starting point to try and find the victims, or potential victims. We had to speak to them to see if there was a case to actually investigate. The historic sexual exploitation cases are such a large investigation they're often constantly ongoing too.

I know you have already touched on this but can you please explain the process of investigating a cold homicide?

Every one is different sometimes if you're very lucky, you get everything on a plate, it's all neatly boxed up, all catalogued and you can go straight to everything you need and er, it's all there. Others, you get very little so, and depending on how old it is and how it was recorded. If you're going back 30 years, and in my particular case in 1992, er, it was on computer and a lot has been transferred on to a computer so there is a computer record. But not everything is transferred on to the computer so you've basically got to find all the documents, so all the original statements, all the original reports, messages, the SIO policy. In majority of cases the Senior Investigating Officer has policy books. On the day of the murder, he'll do a summary of the actual incident and then his thought processes throughout the investigation. This should be recorded in the policy book which gives you a good idea about where it was going and why it was going in that particular direction. If you can get all of those books that's great because sometimes they're not always transferred on to the computer in full. You need to find the originals. So it's case of finding all the documents and it's a painstaking job of reading through absolutely everything cos' the idea is, at the end of the day we're going to produce a review document. So we've got to be able

to say that we've done it thoroughly. That we've looked at the witnesses, looked at the potential suspects back then, we've looked at the forensic policies. And if we're going to prove anything, if we're going to come to a successful conviction on one of these cold cases, it's either going to come from a witness who has suddenly going to come forward or one we didn't know about, or a witness we did know about who we revisit because we're not sure they were telling us everything and 20 years later, their elegances may have changed depending on the circumstances. For example a gang related incident, that person might have been reluctant 20 years ago, but now they may have moved on, be a different person and feel as though they can say something about what happened. But unless you knock on that door of that person, they're unlikely to come forward; as far as their concerned, they might have put it to the back of their mind and forgotten about it. So it could come from a witness, but more likely, if we're going to get a breakthrough it will be from forensics because they've moved on such a long way and if we can find the original forensic submissions and see exactly what was done back then cos' forensically things have changed, not only has it improved where DNA is concerned and the processes they can use these days are more accurate, the whole forensic processes have changed with how we get things done. We have things from over 20 or 30 years in storage or in forensic storage down in the archives so sometimes it seems like we don't have some things. If we can find the stuff in the first place, then we can review it. We each have a forensic manager appointed to the case, it's not just us the reviewing officer who is making forensic decisions. We find the stuff in the first place, we find the reports and the hard evidence, the exhibits and then we submit the reports/suggestions and then we discuss it with our forensic manager and they will make the decision as to where it's going to go and what we're going to do with it. Since we started doing the reviews, we've tweaked it a little bit. Right at the very beginning, the document of all the known exhibits that we have in the case and they can look at everything in the entirety and have like a phased approach. So they'll select the items which they think are the best and then we'll work down the list. But everything should get looked at. That's rather than us being selective and sending stuff over, they get the complete list now. It seems to work but it is a very long drawn out process. Especially if you're having problems locating the items and it all depends what sort of condition the items are in and how they've been stored as to what they can do with them now after 20/30 years. It has its ups and downs, obviously you start off and you think great, I've found this item, surely we're going to get something from it, so you pin all your hopes on that one submission and that comes back negative. So everything after that you're hoping you're going to get some form of breakthrough. But it usually starts off with your best shot, so it can be a little bit deflating at times if it comes back with a negative result.

Would you please be able to tell me about a cold case that you've investigated?

I was familiar with the name (of the case) but I didn't know the full circumstances of it. But it was a young woman, erm, I think she was in her early to mid-30s. Moved about a bit. She unfortunately slipped into a life of drugs and prostitution. She still had contact with her family but her lifestyle was a bit chaotic to say the least. She just disappeared. This was in 1992. I've gone through all the statements and sightings. She was seen in January 92 and there are some other sightings of her throughout the summer but they weren't definite. And then unfortunately her body was found in September 92 in a shallow grave in woodland with multiple stab wounds. Initially investigated by another force, but once they found out where she was from, they passed it over. Unfortunately, because of the decomposition, there

wasn't a great deal they could do forensically, erm, with the scene. So forensics back then didn't take us much further. A number of people were considered as suspects and interviewed back then by the team in 92. But there was no forensic link to any of the suspects, there were no witnesses who came forward with any vital information about who had done it. All they could say was 'this is where she was found'. They couldn't say she was actually murdered there. They don't know how she got from wherever she was picked up, no doubt she was taken in a vehicle because it was a very remote spot. The only thing they could say is that she'd been transported there; they didn't know if she'd been transported there dead or alive and murdered somewhere in the vicinity of where she was found. That was as much as they could possibly do back then. They did do some forensic work but like I said, they couldn't identify any potential suspects through that and the names of suspects that were put forward, there were no real evidence to support it. In one case, there was a little bit of circumstantial evidence but nothing that would have warranted a charge. So the case, unfortunately, came to a bit of an end, erm, several months later and it was filed. There have been some reviews in the intervening years; little bit of forensic work. But again, it hasn't taken it any further forward. So I started working on it nearly 2 years ago. What I should say is, why this particular review has taken so long. It wasn't until 10 years later that another suspect came into the frame where there was something quite compelling, in that another body turned up in the same wood. So another young woman, 10 years after the one I'm reviewing, this is in 2001, the body of a young school girl was found in a shallow grave, had been murdered but not multiple stab wounds, she'd died of strangulation. But again she'd been brought by vehicle and left in this shallow grave. The breakthrough they had on that was that they did have some forensic evidence eventually and they identified a suspect and that suspect from that point onwards then became a suspect for the 1992 murder. He was interviewed and denied any knowledge of that murder and unfortunately there was no forensic evidence, so again, they couldn't take it any further. He was merely a suspect and the coincidence was, that we knew he had committed a murder 10 years after the original event. So what they were thinking of, which was the same as what I was thinking at the time, what's the chances of someone else committing a murder and burying a body in the same wood, in similar sort of circumstances. But you've got to keep an open mind. I didn't pin all my colours to that mast, I didn't say 'it's definitely that person because he's done a murder 10 years later'. You had to look at absolutely everything. I kept an open mind about the earlier suspects. So what I'm working on at the moment is, mainly, there are two potential suspects; 1 from the 1992 and this chap from 10 years later who murdered the other young woman which we know he was guilty of because he admitted responsibility. So we've been working forensically; there's two ways we've been looking at it, now we've been looking at the actual scene of my 1992 murder. Is there anything forensically there, at the scene or on the body that we could submit and potentially link to one of our suspects using the latest techniques. And the other way we're looking at it is, we're looking at our suspects, the 2001 suspect and is there anything from him, where he used to live, any property we've seized from him or from his address, is there anything there that can potentially link to the 1992 murder. So we're looking at it from both angles. We've just been trying to identify any potential forensic work that and that's still currently ongoing and we're still making submissions to the labs. We've not had a breakthrough yet. We've certainly progressed the case. You haven't got to get too disappointed when you're doing a cold case review. What you've got to say to yourself is look 'I might not detect this case, but what I'll do is, bring it up to date.' We'll do absolutely everything to bring it up to date with all the forensic work,

all the techniques and then when we finally come to the end and do the report, we can say there's nothing more we can do at the moment. We've done absolutely everything. You might want to ask me about the family, that's another issue about notifying the family and the reaction you sometimes get from them. But at least if we want to contact the family or if the family wanted to know, we can say 'look this is what we're done, there's nothing more we can do at the moment but in 2 or 3 years' time, we might come back to it and see whether there is anything else we want to do with the forensic work'. That's what we hope to do.

So the decisions you have made, why do you think you've made them?

Every case is different, we don't really work from a strict order. But we all sort of sing from the same hymn sheet so to speak. We all know the important things, the forensic review is the important thing. The decisions we make are based around what we can do, what's achievable and in most cases, it is going to be the forensic stuff. It might not be achievable to go speak to a witness or a suspect again because, as I found out, some of them have died. There was one particular suspect in my case, who died in 2009. So you're limited. You can still do the forensic work to try and completely eliminate that person. But you're not going to progress it any further by speaking to them. It's because of the length of time of some cases, you're limited to what you can do. But as long as you document that, and say 'look, that's what we considered but we can't do that because...' then at least when someone reads the review, they know not to go down that particular line.

Do you think anything else might have influenced your choices?

It's an ongoing issue this, regarding the family. And erm, I don't know how I'd feel, say for example if I lost a brother or a sister 30 years ago, and I'd moved on completely, you know, still had the thoughts about that family relative but it's not something I dwelt on. Suddenly you get the police knocking at your door saying we're going to review the murder of so-and-so, this is what we're doing, how would you like us to keep you informed? It's difficult. Plus, you've got to consider in some cases, depending on the circumstances of the case, you might not want to tell the family. Because the family might be involved or have some elegance to the people who were involved. So you've got to be careful how you approach it. But in my case, it wasn't anything like that, it was a case of do I let the elderly mother know or her siblings know what we're doing. Now the policy is still being written so to speak, we were directed at the very beginning to contact the family members which I did do, just to let them know who I was and what we were doing. I did get the sense that they, er, not unhappy about it, but probably didn't want to be reminded. And I know for a fact that one of my colleagues had to go see the family over another matter, and they made comment that they wished they'd never been contacted in the first place. So it's a difficult one to call really, you don't know what to do for the best. I think in some cases, I don't know, my view is do the review and if you get some sort of a positive result, tell them then. Say for example, you unearthed a new suspect, and you were going to arrest him or if you were going to do a crime watch appeal or something like that, you got to inform the family. But you know, there might be an argument of don't bring them any more grief, just get on with it and then, er, let them know, you know, if you need to. I think what they did was made some sort of announcement when they set up this team that they were going to be reviewing all the undetected murders so we thought 'oh we better tell these family members it's their loved ones we're going to be reviewing' because otherwise they might be ringing up and saying 'well what are you doing about my case?'. I think we've had that. Someone has rung up and

said are you looking at the death of so-and-so. I don't know what the best way forward is, that's obviously for the boss' to decide.

I know you've mentioned you worked on this particular case for nearly 2 years, would this be the norm or would you normally have other cases too?

It just depends on how many days a week you work. When they set up this team it was an arrangement where you could be part time; it's ideally suited for part time if you can't commit yourself to 5 days a week/40 hours. It doesn't matter if you can only do 3 days/4 days, because a lot of the cases, they're there for the long-haul. You're not going to get an instant hit. A lot of the time, you're governed by how long the forensic work takes. You've got to find the stuff in the first place, submit it, and then you might be waiting weeks anyway, for the result to come in so, it doesn't matter really. But yeah, they do tend to take a long time and it's down to the forensic side of things. Each submission can take months until you get something back, so you're moving on to the next sort of phase. I know some of the full time officers carry more than one case. But in my particular case, it's been such a big investigation, and because it's spread out into this other suspect, there's no way I could have carried anything more than this because it's almost like it's 2 in one anyway. And I don't work full time, so even if I had of been full time, could it have been done any quicker? Possibly I don't know. But you can only do so much with what you've got forensically. And in this particular case, some of the stuff only just turned up a few months ago. We'd been looking for something for a long time and we eventually found it, so even if I had been working full time, I'd of still been...I wouldn't have been able to do it any quicker because we didn't have it.

Due to your previous service, you have had experience investigating live homicide cases, so other than the fact the live homicide has just happened, what is the difference between investigating a live homicide and a cold homicide?

Well the main difference is, when you're starting off with a fresh investigation, you don't know what you're going to find really. You know you're speaking to people for the first time, er, but rather than with a cold case, everyone who was identified as potentially a witness or all the forensic work, it's all been identified in the past. It's there for you to sift through and review it again. Whereas with a live one, there'll be lots of different twists and turns on a daily basis because you don't know what's going to come next. And it all happens so quickly on a live one. Within the first two to three days, in most cases you generally get a steer as to you know, where you're going with it, if you've got a suspect arrested. The evidence is very quickly collated, assessed and er, dealt with whether it's a suspect or forensic work, it's all there for you to find and deal with immediately. It's not like that with a cold case, it's all been previously done and it just takes time. You've got to be very methodical. It doesn't matter if it takes a week or a month, you've just got to keep on looking for it.

How do you decide which cold case gets priority over another one?

Well we don't make that decision. That's obviously being made by our supervisors and I think, I don't know if they did use a matrix. I'm just trying to think how they er... I think it may have been, you'll have to check with some of my colleagues. Yeah, it's coming back to me now. I think when we started off nearly 2 years ago, the first ones that we dealt with, and in my case the one I am still dealing with, started off some kind of review which was incomplete. They did have a team who were reviewing some of these cases er, for whatever

reason it came to an end prematurely. They didn't complete the review because I remember seeing the review they started about 18 months prior to us starting. So I think that's how they identified the first sort of wave of cases because they'd actually been started. And then, er, the ones following that, we do have a list and I'm not sure how they've done it, whether they've prioritised them or not on a matrix. I'm not sure.

How likely do you think it is your emotions may affect or influence the decisions you make when investigating a cold case?

Erm, no, not really. They're not...it's not that kind of work. Obviously you do become attached to the case that you're working on. But, er, emotionally, no I don't think you get involved in it. Because you're not dealing with, er, most of the time you're sat in the office at a computer or reading a document, so you're not dealing with the connection. You've got photographs to look at but you've not got that connection, not like a live case where you're dealing with the here and now. There's a strong drive with myself and all the other members of the team to get the job done properly. You do, I mean the more you read about the people you're investigating, emotionally yeah, you do feel sorry for them. I mean this young girl that I am dealing with, I've seen a photograph of her and I know she had a young child and I just think, ya know, it's a sad waste of a life and her family seem like a really nice, decent family. They spoke about her being a normal little girl but just getting in with the wrong crowd, then drifting off in her late teens/early twenties...I just think she was very vulnerable and just went from one bad relationship to the next, obviously got involved in drugs and prostitution so you know, you do have that connection to an extent. You do think about the person that you're [helping] and also, you think about the family. My main sort of drive and trying to get a result is to bring some form of closure for the family. I'd like to be able to go to the family and say you know, "I'm sorry I bothered you a year or so ago, but we've actually found who's done it". It would be nice to be able to say that.

In an ideal world, what new evidence would you want when taking on a cold case and why?

It's got be forensic evidence, absolutely. Obviously with cold cases, er, people's memories fade. A lot of people can't remember what they did yesterday never mind something 20 or 30 years ago. If you were to ask me about a case when I joined the police force, I'm sure I'd have a different memory of it now that what happened in reality back then. And getting a case to court, based on witness testimony is bound to be difficult because of the gap in time. But if you've got forensic evidence and you can place a person's DNA on a weapon or at the scene of the murder, on the body, there's no other possible explanation that that person has done it, then it's got to be forensic evidence yeah. As I say, it's moved on, it's more sensitive. It moved on in the 3 or 4 years I was out of the job! That just tells you how quickly things progress and change. That is the interesting part of the work that we do; the forensic side of it and potentially what we can do.

So for the last part of the interview, I am just going to present you with some scenarios. Let's say there were two cold homicide/sexual offence cases, one which was committed in 1998 and one committed in 2005, which one do you think you would be more confident investigating? And why?

98 and 2005? Erm, obviously it depends what you get when you open up the box, but the way that things were recorded in 2005 would be more in tune with the way we do things

now. It might be better recorded on the computer systems we do. Everything's changed, the way we record things, the property we used to have, I don't know if you've heard of it but we used to use KIM and we've moved from that to NICHE. I think that was in 2005. There will be a lot of information put onto NICHE right at the very beginning as opposed to being transferred there from an old record. Because you don't know what's been missed off. But the tools that we use, er, computers are very important. If the right information is on the computer it's a big help. So in 2005, you might have a better chance of it being a more accurate computerised record and obviously there is less chance of it being misplaced. You haven't got as many years between...there'd be an extra 7 years for stuff to disappear in the 1998 case. The closer you are to the present day, would hopefully be better.

Again, you're faced with two cold homicide/sexual offence cases, one with massive media coverage and the other without, which one do you think you would be more confident investigating? And why?

Er, it just depends if the coverage is positive or not. That's a difficult one to answer. It has been done in some cases and as long as it's done in a positive way. Sometimes, any news can be good news. It just depends whether you want it. If you didn't want it and it was effecting the investigation then obviously probably the one without but if it's generating some public interest and you're getting some calls in from the public which are helpful, then you wouldn't have anything against it. It just depends how it's effecting the case. I mean, we do go to crime watch, and this might be a consideration for my case. If it's a significant anniversary, the 20th or 25th anniversary, we're coming up for a significant one this year – 25th anniversary in September. So we're going to have to consider whether we're going to do something with crime watch or a press release but again, we'd have to think about the family and what do we hope to achieve. Has it been done before? Did anything come of it last time? Because if they didn't come forward 3 or 4 years ago, then you've got to consider should we be doing it again? How's it going to effect the family? It's not my decision but it's something that we will consider.

Let's say you were investigating a cold case and before you start, you see the names of the investigators who looked at the case previously and you recognise one to be a very good detective who has a great track record solving cases they look into. How do you think this would affect your review of the case? Would you do anything differently?

What's happened in this particular case, I do know the, not the original investigating officer, but I do know...I worked for the person who was the SIO for the arrest of the second suspect in 2001 and I know he seriously considered this person to be a suspect for my case and I have actually spoken to him in person about the case. Just to see if there was anything that he could add to it as he is no longer in the force. Obviously you respect your colleagues who have previously investigated it but I wouldn't let it colour my views on what I should be doing. Just because I knew the person, he was a very good detective, I wouldn't think "oh well so-and-so was on the case so there's not much I can do if he hasn't been able to" because things have moved on since that person's time. You've got to look at everything with a new set of eyes. You've just got to look at it from your own perspective.

Appendix Eight – Interview B

Firstly, would you be able to tell me about yourself; your service with the force and how long you've been with this current department.

I've been currently with the review team since August 2015, prior to that, I was a serving police officer. Most importantly, I was a member of the Homicide and Major Enquiry Team (HMET) from about 2004/5 ish. I retired in 2011. So that's basically how come I'm here. Did a bit out in the private industry, investigating insurance fraud but came back to do a proper job.

What is your first initial thought when you hear the term 'cold homicide/sexual offence case'?

Clearly, a cold case tends to suggest that it's a historic job. Cold case is probably an Americanism that's come over here and is probably used more by the forensic science service more than we do. I don't think we call them cold case reviews or investigations, we tend to call them historic crimes. So it's a historic job, erm, cold case obviously suggesting not a lot has been done with it since whenever; whether it be 2, 3, 4, 10, 20, 30 years. So that's what you clearly think from the term cold case.

You may not have had experience in these, but similarly, what is your initial thought when you hear the term historic homicide/sexual offence investigation?

Due to the fact that operation recall has been going on for so long that it has become part of everyday policing really. So therefore, that process seems to have gone on for many, many years and therefore, doesn't seem as, er, it's a resurrection of a crime. It seems to be a process that every so often, they will be looked at in that process. Does that answer the question? It's like they're not a separate category anymore.

Please could you explain the process of investigating a cold homicide/sexual offence case?

Yeah, erm, clearly, I'll start off by saying they're all different. They all, potentially, have different enquiries to make on them. But basically, we work from a list of, er, unresolved I think the term is now, murders. Initially, I think it was about 74 but I think the artificial barrier has now gone and we will effectively look at any murder beyond the date previously set. So we're given a specific job to look at, clearly, you may or may not have personal knowledge of it depending on when it happened. Most, from my experience, we are currently looking at, the batch that we're looking at, I haven't got an in-depth knowledge but I do tend to recall when they happened. They are about 30 years old so they're certainly within my life time. As I've said, first thing I do is get the job, next I find out what the job was and try to collate all the information that we currently have available to us. Now the review process should take place every two years for undetected murders and for whatever reason, clearly different things happen throughout the last 20/30 years, they've been put on the back burner. So some are considerably longer than others since anyone's looked at them. So it's a matter of gathering what we've got and seeing, particularly, the circumstances of the murder. The main things we tend to look at, in historical jobs are, the two main ones are looking at potential witnesses who may have changed their elegances and may be able to give us a different account to what they originally gave back in the day. And obviously, the most obvious one is the forensics, the development in forensic science, that sort of thing. So those are the two main principles we work on to try and achieve a result as of now. Now as I

said, in order to achieve that, we've got to know what we've got. So one of the most important things that we have to do, is, er, find out what exhibits we have available. Now that mean physical exhibits that we the police have retained, ie, clothing, bedding, stuff from scene. But also what we've got to bear in mind, is that when the original job was investigated, forensic science will have been sent certain exhibits. They will have got tapings so therefore there's the forensic exhibits as well that we have to find or establish where it is and see what we've got there. So then we can work out a strategy going forward. Because clearly, we can't do anything unless we know what we've got. And again, similarly with witnesses, it's a matter of reviewing what witness statements we have to see exactly who is saying what, what relationships were between the parties involved, whether it be just the victim or the suspect as well. So it's a matter of, in a nutshell, assessing what you've got, and seeing where you can go, developing a strategy to take you forward. It is unfortunately long. It's great on television when they do it in a week, I wish that we could do anything in a week! Our jobs clearly because of what we do, take a long long time and they can't be rushed unfortunately. So that's what it is.

Would you please be able to tell me about a cold case that you've investigated?

[Produces a cold case review book] yeah, well I don't know whether you've ever seen a review document? **No.** Well we have tried to standardise the format that we do them in as obviously there's going to be quite a lot done. Erm, but basically, this case involves a gentleman which was quite an unusual murder in that this happened back in 1985 when the world was a totally different place and people didn't talk about certain things. He had lived his life throughout England and Scotland, been married once or twice, and had settled in an area the months before he died. He had no immediate family living with him but his stepson and wife looked after him. They all effectively lived in the same area and they just oversaw him really, er, tried to look after him in that way. Unfortunately the gentleman had some medical problems soon after re-locating and ended up in hospital. He lived in a flat on his own, as I said, fairly regular contact with his stepson and wife and was er, trying to integrate into the community. One particular night, er, normal trip, stepson and wife, go with him to the supermarket, er, come home. They've gone in his car, he then takes his car back home, and returns back to the stepson's house because he'd forgotten some cigarettes and that effectively is the last time that he is seen, alive should I say. He then is found 3 weeks later, in a carpark in a different area, in the boot of his own car. As I say, unusual job. Er, his body is in the boot and initially the police believe that it is a suicide. Factors on that was some miscommunication really, it was quite close to the anniversary of the death of his first wife, the suggestions of him being ill as I said, suggesting that he was terminally ill which was wrong. So there was a lot of misinformation that he may be suicidal. In fact, he wasn't. He's found in the boot of his car, someone makes a wrong call at the scene, and his body is recovered to the hospital for a post-mortem. And they find two stab wounds. Stabbed in his chest and stabbed in his back. Er, as I said, unfortunately its 3 weeks after he's gone missing so obviously there's a lot of mess in the boot. His body has clearly broken down quite considerably. Forensic opportunities are therefore somewhat limited. So as I said, the unusual thing about this job is that it then becomes apparent that the gentleman is homosexual which back in that day, back 30 years ago, was quite a difficult thing to deal with really. Erm, enquiries were made in the effect of the homosexual community back in the day, was totally different to what it is now. It was far more underground and not talked about. So it's quite difficult enquires to make at that time. To cut a very long story short,

there is no obvious motive for the death. Usually he is found in clothing that is alien to him. He's found on a blanket which is army issue, he's also got a head warmer on which again is army issue erm, and they are then looked and tried to identify whose they were. They are definitely not the deceased so wanted to know where they'd come from. The jeans that he's wearing, the jumper that he's wearing were also not his. The only things we believe are the deceased were some shoes in the boot of the car. He wasn't wearing shoes at the time, he had some socks on his feet but didn't have shoes on his feet. As I said, quite an unusual job, they tried to identify where this clothing is from, they ended up going onto crime watch, and a suspect phoned in purely and simply on the head warmer, which is like a balaclava, there's a name that is, that comes to light under laser light. So they go on crime watch saying is anyone any ideas blah blah blah, and a gentlemen by the name on the balaclava comes forward and is put forward as a suspect. Erm, police do some enquires in relation to him, and he is eventually arrested on suspicion of the murder, questioned about it, and in many respects fits the bill. Because part of the clothing he was found in, is quite specifically manufactured in Canada I think, certainly in America and again when we looked at the suspect, he certainly served in Canada/America with the Armed Forces. Again, enquires found he had homosexual tendencies, he had violent tendencies, so again, circumstantially he was a very very good suspect. But unfortunately, back in the day, they didn't have the evidence to charge him. Although they put a file into CPS (Crown Prosecution Service) they didn't support any prosecutions. So that effectively was as it was when get it. As I said, quite an unusual job really. Back in the day, they clearly done their best on it, so you get it and start looking at that. So as I said, quite an unusual job, an interesting job and there's quite a lot of scope for what we can do with it.

Has anyone investigated this case previously to yourself?

It's been reviewed on two occasions I think. Erm, previously they did a forensic review on it as well the last time in 2001ish/2003, erm and unfortunately it came to nothing then. Again, the interesting thing is, back then, they found a partial profile, DNA profile in the shoe that was found in the boot. As I said, it's not a golden nugget but it's something to go on. Currently we're looking forensically at other things we can do on this job as well. So it has been looked at previously, but again, there are things we're looking at so fingers crossed.

So the decisions you have made, why do you think you've made them?

On this job, this is quite far down the road this one, the review itself is complete and as I've said, the forensic review is continuing. So I'm waiting for results on that. That's the main decision and then looked at the possible relationships of those involved. So went, and this is sod's law...erm, the main suspect, as I said, all the evidence is great against him, clearly they didn't have anything to push it over the edge as it were. So one of the things is looking at the allegiances of people back then. Shortly after the suspect was interviewed and released by the Police and what have you and the case had gone cold slightly, his estranged wife phoned crime stoppers and basically said, he was responsible for it. So again, went to question her, and back in the day and she basically said oh it's because I've fallen out with him blah blah blah. So unfortunately, I was due to go see the wife, unfortunately she's died earlier this year. So I never got to go see her. Because again, not only was I going to see if she might be able to tell us anything, but also to raise some forensic issues. So I've spoken to her family, the son and another member of a family, and got some forensic stuff off them but also discussed the case with them. And from what they're telling me, they say she wouldn't be

able to add anything extra; that she never really thought he was responsible for the murder blah blah blah. So end of story as far as that's concerned. So a lot of decisions have been made in this case with the information we have, erm, and recommendations have been put forward. Which quite a lot have now, and as we've gone through the process, we have been acting on and seeing if we can sort them out. So it's about...er, decisions are as such a strategy and are we going to go along with it and move forward. There isn't much more to do on this case, hopefully.

What was your workload like whilst investigating this case?

Yeah, er, it varies quite a lot, again, the thing with these jobs, because they're so long, and they're all at various different stages, you can end up dealing with 3, 4 actual reviews that are at various stages. And if they're at various stages, that's not a problem, but sod's law, it always happens, that you get the same results [back] for all the jobs you're working on at the same time. It's trying to, basically, what you don't want to do is jump into your forensic review until you've got your head around your own review so you know what the job's about. But that, as I said, takes some considerable time. But what we've also got, is the service of the forensic side of things so we've got to balance it. Once you know what exhibits you've got, you can then start to put a forensic strategy together along with the scientists from the forensic department. It is a matter of juggling and we do also get other enquiries to do but our main job is dealing with these and touch wood, priorities wise, we do ok. So probably 3 ongoing jobs really. And then other things are thrown into the mix as well, as you go along.

Due to your previous service, you have had experience investigating live homicide cases, so other than the fact the live homicide has just happened, what is the difference between investigating a live homicide and a cold homicide?

It's totally different. Absolutely totally different. Obviously live ongoing jobs are quite dynamic and are fast paced, moving forward. Whereas these aren't. Basically it's a matter of sitting down, doing a far more analytical review of the job. Because you've got what you've got in a lot of cases. There's not a lot you can do to change the evidence that is what it is. Evidence gathering on a live job...the world's your oyster, you've got whatever you want. Here, looking at an old job, clearly the constraints that are available to you there...just as one for instance, mobile phones – everybody knows these days that police use mobile phones to gather evidence. Unfortunately, for a historic job, it's not there. The data isn't there, there's nothing you can do about it. So links that you may now think as of obvious go and see if they're linked by checking telephones blah blah blah, you can't do that. So you've no idea about linking people that way. Stuff like that is far more difficult, in that you are unable to follow lines that you would have liked to have done. And again, the way that crimes are investigated these days are totally different to how they were done then. You know, we use the word more professional and they are more professional. These days they are far more professional than they ever used to be and you look at things and you think erm, why haven't they done this, why haven't they done that but you know really that there's not a lot you can do about it. Interviewing of suspects, totally totally different and a lot of, er, you're reading interviews from back in the day and you think that they missed opportunities that effectively back in the day, all you did was ask them about the job in hand. Erm, whereas if you interview someone on a live job it's not just about what's happening today, what they did, so you can build a picture up so you can then check what

they've said to you and determine the validity of what they're telling you. You can't do that on a lot of the interviews from back in the day because they just aren't in-depth enough, they're not structured, and it's just the way things were back then. So it is frustrating at times, but unfortunately and a lot of the cases, it's about them identifying potential witnesses that can be approached and seen, if you can find something different out. But far more limited to a live job, far more limited. You are more reliant on forensic issues on a historic job than a live job but again, what you've also got to be wary of is that forensic issues now weren't dealt with as they were then. DNA – nobody thought about DNA 30 years ago so therefore, the actual integrity of the exhibits you've got to be aware of that, any contamination issues and such like that. Totally, totally different. But in a different way, they are far more interesting because it's you, you're looking at it, you've got that, you know everything about it so as far as that's concerned. A good exercise as far as investigations go.

How do you decide which cold case gets priority over another one?

We have a matrix, basically, of cold cases, of undetected murders. Unfortunately, we started off with something like 40, 42 I think there was. Then throughout our enquiries, we've now got that up to 80 odd. And then I think we've got it even higher because obviously all they were thinking about was actual undetected murders and then we've got acquittals which are people who've been to court on a murder and get off at court with it. So there's them to consider as well so our task, our list, from one to a better word, is far larger than it was at the start. That is prioritised from a while ago, I have no idea who did the matrix originally. But that was prioritised back in the day, I don't know, 10 years ago so initially we started working off that. But now, I think we're trying to get a more scientific approach to find out what we have got and what we have a chance of achieving with the jobs really. But having said that, you've still got to do certain sort of assessment of a job before you can make that decision. At the moment we're looking at jobs that we are aware have got potential shall we say but I think everyone has identified it's not right how we're getting them at the moment. It's a bit pot luck at the moment. And it shouldn't be. There should be a process that decides which one we stand a chance in getting a result from. But that isn't happening at the moment. **Why do you think that is?** Erm, just purely workload. Someone having to sit down and develop a fool-proof system that sorts them out into ones more likely to get a conviction at court should we get a result from the review. We're working on it though, we're getting there. We'll get there eventually.

How likely do you think it is your emotions may affect or influence the decisions you make when investigating a cold case?

They don't really. I've been doing this job for far far too long for emotions [laughter]... I don't think anyone can show me anything I haven't seen already really. As I said, a long time as a murder detective working on live jobs, you know that emotions have nothing whatsoever to do with an investigation. When I was tier 5 interviewing, first thing you are told is never let emotions get in the way of interviewing because you're defeating the object of the interview really. I might be unusual but [laughter] no they don't.

In an ideal world, what new evidence would you want when taking on a cold case and why?

If you could tell me who'd done it then that would be great! [laughter]. Erm, I don't know. I can't think. It's like I said, on a live job you've got so much communication data, if I

could have the communication data from olden day jobs that would be great for me. As I said, it gives you ties to people and gives you a start really. Whereas on these, you don't get anything, you have to work it out from the very beginning really. And this one [that I'm looking at] wasn't on HOLMES, this was actually pre HOLMES so finding information out is literally reading it. So yeah, that would be my ideal.

So for the last part of the interview, I am just going to present you with some scenarios. Let's say there were two cold homicide/sexual offence cases, one which was committed in 1998 and one committed in 2005, which one do you think you would be more confident investigating? And why?

Confident in investigating or confident in getting a result? Both. See neither are that old! [laughter] strangely enough. So I wouldn't have a problem investigating either one. Erm, 2005 then that's with the inception of HMET so would they have investigated in? Potentially yes. So a more professional investigation? One would hope so. Possibly, the 2005 one. Purely and simply, because we were more professional. Purely and simply for that.

Again, you're faced with two cold homicide/sexual offence cases, one with massive media coverage and the other without, which one do you think you would be more confident investigating? And why?

Again, the more coverage you get the better really. Old all story, the public tell you the answers. We very rarely have the answers. Go out to the public, find out what's happening, somebody tends to know what the answer is. So it's a matter of hoping that that person comes forward. The downside on any investigation with lots of media interest is that you get people ringing up and giving you rubbish. But it's a matter of filtering the rubbish to find the nugget really. So yeah, one with lots of coverage is great. That's what we try to get with these but we struggle.

Let's say you were investigating a cold case and before you start, you see the names of the investigators who looked at the case previously and you recognise one to be a very good detective who has a great track record solving cases they look into. How do you think this would affect your review of the case? Would you do anything differently?

Erm, no it doesn't, it doesn't affect your review of the case whatsoever. As I say, if we're reviewing it, it means it's undetected. It's like with all these jobs, you're looking and hoping for, a bit of luck really. There's very little that an individual can do that goes through the motions that you're supposed to do and they don't get a result. As I said, like on a lot of these jobs, you've got a very very good idea who was responsible for it but no evidence. Now, as long as that's right, and that we haven't made an assumption that somebody has done something and we're looking at the totally wrong horse, which we've done in the past, then it's a matter of being objective enough to look at everything you've got, irrespective of whose looked at it before. Whoever has done it in the past, it doesn't matter, you look at what you've got, er, and assess what you've got to go forward and it makes no difference whose looked at it in the past. It's a matter of looking at it. If he's a good detective then he's been unlucky, if he's a bad detective then he's been unlucky, does it really matter? No. Makes no difference.

Appendix Nine – Interview C

Firstly, would you be able to tell me about yourself; your service with the force and how long you've been with this current department.

So got 25 years' service. Worked all over the shop. I've done neighbourhood, CID, HMET, even a bit of firearms. I then retired in 2015 and got asked specifically by the Chief to come back in as part of this team to review cold murders and sexual offences. I was happy to come back, getting a bit bored at home watching loose women [laughter]. So yeah, that's me.

What is your first initial thought when you hear the term 'cold homicide/sexual offence case'?

Erm, that no one has solved it I guess. A crime where you've got no idea who's done it, or sometimes you have, and you've not got much to go on evidence wise. So it's an undetected murder or rape and there isn't much evidence.

So would your first initial thought be any different when you hear the term 'historic homicide/sexual offence case' for example the historic sexual abuse cases?

They're basically the same thing. I think no differently when you say cold to when you say historic. I just club them all in the same thing. They're undetected or unsolved and they need solving. I think the public would probably think historic applies more to the historic CSE in the media at the moment.

Please could you explain the process of investigating a cold homicide/sexual offence case?

Well, it's a long process to be honest. The older you go the more boxes you tend to have. Providing they've stored them alright. You should see the state of some of them! Anyway, the job I'm working on I had 6 boxes, jam packed full of paper that I had to go through before I did anything else. You can't do anything without knowing what happened in the case itself. So yeah. Then really you move on to what you've got. First thing we like to know what forensic potential we've got. So I'd, after reading what actually happened, I'd want to know what forensic exhibits were available. That's where we'd get a breakthrough, if anything. Especially with the advances. After that you just get everything out you've got and read. It's better if you get one post HOLMES because everything is electronic. Paper is a nightmare! Reading people's handwriting is hard work [laughter]. Then you sort of get a plan of where you want to go with it. You quickly see what is missing and what they haven't done back then. You then just start making your way through it the best you can. It's fine because you don't have the same time pressure as a live case but it's still a lot of pressure when you've got more than one case. You kind of want to get as much as you can done as soon as possible and then you can hopefully help someone else by looking at their case. You want to offer as much as you can to the victim and their family so the more cases you can be reviewing the better. But you want to do a good job too. Don't want to rush it.

Would you please be able to tell me about a cold case that you've investigated?

So one I've looked at wasn't nice, I mean none of them are exactly nice! But yeah was a murder of a young lady back in 1989. Found at the back of a disused building, down like a ginnel. Well this ginnel was well known back then for, let's say, unsolicited behaviour between females and males. Anyway, our victim was a known prostitute at the time. They

were a difficult group to talk to, didn't like the police for obvious reasons. She had one sister but they didn't have anything to do with each other so there wasn't really a drive in that sense. Officers at the time did enquiries as best they could. Obviously men in the area wouldn't admit to seeing our victim and wouldn't speak to them. There wasn't much evidence wise. She'd been stabbed multiple times and it was clear she'd had sex prior to death however it was unclear whether this was consensual or not. There was a condom at the scene, but there were also several in the ginnel and it was impossible to say which one belonged to our suspect. They were all seized. But DNA was only got from some of them. No hits on the system when they've been tested. I've been given another this morning but I haven't even started looking at it yet so I can't even tell you what that's about. I've got 5 boxes though [laughter] so guessing it's going to take me a while to get through all that!

Do you know how many have investigated this case previously to yourself?

It's had one I think. In about 2000 but by the looks of it, they didn't do much. Sort of looked over what had already been done and assumed nothing else could be done. Which is frustrating. There were a few potential suspects at the time and they should have been looked at again but it doesn't look like they were. We have details of a fellow prostitute which worked with our victim whom they spoke to again but she offered no further information.

So the decisions you have made, why do you think you've made them?

Well basically I think the major thing here is the DNA. We've got some possible samples and they've not been checked with the DNA-17 which is what I'm doing so I'm hoping it will throw something out that end. If not, I guess I'll have to try speaking to her friend again. While I'm waiting for the DNA results, I'm going to see what I can find out about those potential suspects at the time. So I think I've made these because of what the officers have missed really. And the fact there is DNA potential. Sort of pinning my hopes on that.

What was your workload like whilst investigating this case?

Ideally, we'd have one. Move on to the next when we've finished. It's fine when you're waiting for something to come back on one case, so you make a start on the next. That's quite normal in any job. But when you're working on 3, 4, 5 at a time, it's hard. You want to give your all to every single one. Not saying we don't, just resources I guess. I've got 2 ongoing at the moment but think they're looking at giving us all another in the next couple of weeks too.

Due to your previous service, you have had experience investigating live homicide cases, what is the difference between investigating a live homicide and a cold homicide?

Oh god they're totally different. Totally different. There's so much more pressure and everything is so quick pace. You have to do things so quickly because you're up against the custody clock and everything needs to be done. You don't have the time to sit and wait for forensic results like you do with a cold case. You also get to know things because you're in it. Sounds obvious I know but you go to all the briefings, you read all the reports, and nothing is missed. Whereas with a cold case, you've no idea if you've actually got everything. And reading the briefing notes is not the same as being there.

How do you decide which cold case gets priority over another one?

Erm, it's not something I have involvement with, that's done higher up. I think they do have a way but I'm not sure how really. I think at the moment, they're selected based on what evidence is available to us so how much we can actually do with them. Maybe it should be looked at because that might not be a fair way really.

In an ideal world, what new evidence would you want when taking on a cold case and why?

It's got to be DNA evidence really. That's more difficult for a suspect to account for you know. So if their seamen is found inside the victim as well as clear signs it wasn't consensual, you can imagine how difficult it would be for them to explain that? I mean it's not perfect, but it's a great one to have. Then if you've got er, witnesses and other evidence too, that DNA just sort of, cements it all together you know? So yeah, DNA I think.

How likely do you think it is your emotions may affect or influence the decisions you make when investigating a cold case?

Definitely more on a live job. You're speaking to witnesses in the crux of it. They're emotional, you can't help but feel it too. Whereas in a cold case, I mean yeah you do still feel the emotion from victim's families but sometimes they don't want to know. So you don't really get that emotional involvement. I mean you still want to get justice for the victim so I guess you're involved in that sense. But it doesn't make you decide to do things differently, even on a live job. You can't let your emotion effect anything because you might cost the case. So yeah, I don't think they do really.

So for the last part of the interview, I am just going to present you with some scenarios. Let's say there were two cold homicide/sexual offence cases, one which was committed in 1998 and one committed in 2005, which one do you think you would be more confident investigating? And why?

Definitely the one in 2005, there is more chance that you have everything with that one. I mean the gap between them isn't massive, you still might have everything in 1998 but still, you think the less time that has passed, the more likely evidence is still as fresh as it can be, witness memories might not be corrupted as badly. You know? You've got more to work with I suppose. But I think I'd still be confident with the 98 one too really.

Again, you're faced with two cold homicide/sexual offence cases, one with massive media coverage and the other without, which one do you think you would be more confident investigating? And why?

I don't think it matters. The media can help sometimes but it wouldn't be my decision to do press releases anyway. It wouldn't put me off though, taking on a case that was in the media a lot. It's just a case isn't it? You do what you can, with what you're given and hope you can get a result. If you don't then it's not your fault. Hopefully in the next review, someone else can get a result. So yeah, wouldn't make me feel less confident or more confident really.

Let's say you were investigating a cold case and before you start, you see the names of the investigators who looked at the case previously and you recognise one to be a very good detective who has a great track record solving cases they look into. How do you think this would affect your review of the case? Would you do anything differently?

No not at all. Sometimes you find that whatever they did back in the day was a sham anyway. That they missed loads of things and focused their investigation a little wrongly. So it wouldn't affect my work. I'd start again regardless who had looked at it before me. Thing is, policing has changed a lot over the years so the things they did back then, we don't understand or appreciate as it's done so different now. And better. So yeah, it's just one of those things, you just start again regardless.

Appendix Ten – Interview D

Firstly, would you be able to tell me about yourself; your service with the force and how long you've been with this current department.

Well I joined the police in 1987 and I worked in the Metropolitan police in London for 10 years but in 1995 I got badly injured on duty so I was ultimately medically retired from the force. So I'd worked on mainly central London, erm, uniformed, plain clothes, vice unit, Paddington, East London, and then relocated & joined my current force. Worked as an enquiry officer, worked in case file preparation unit and in 2005 when HMET started, Homicide Major Enquiry Team, I went onto that team as an Investigative Support Officer so file preparation, case builder, disclosure officer and I've been there ever since but for the majority of that time I've been working on Operation Recall on cold cases. So myself and possibly 2 other colleagues within that team, are the longest serving members on the team. So we've worked on a lot of cases over the years. We've had breaks in and among some, we've had to deal with other enquiries, live enquiries, I mean, I was 3 years back on homicide team. But largely it's been cold cases in the time I've been on HMET which is where we're back doing what we're doing now. Yeah so that's me. 30 years' service in the police.

What is your first initial thought when you hear the term 'cold homicide/sexual offence case'?

Erm, well undetected, historic sexual offence. Because in our case, because we're working on operation recall sexual offences purely, that's what I think of. Yeah, an undetected historic offence.

So I know you've already used the term 'historic' but would your first initial thought be any different when you hear the term 'historic homicide/sexual offence case'?

Erm, yeah, I think cold is a term that we just get used to using really. When you say it's gone cold, in my mind they're not cold are they now? Because they're all there to be investigated and looked at again so. They might have been left for some time but historic is probably a better term to use really. Just trying to think how often we use the term cold case...I just think it's when you mention to other people. Some people have an understanding of what cold case is from what they see on the television. I mean you could say operation recall and they wouldn't know what you mean really so you have to explain yourself.

Please could you explain the process of investigating a cold homicide/sexual offence case?

Yeah, yeah, we, erm, from our point of view on the sexual offences cases you'd initially, you're completely led by the forensic science service and they've had the foresight to retain forensic samples erm, in relation to undetected sexual offences from forensic samples from items of clothing in stores or achieves. We've literally got racks and racks of all these slides from crime scenes – semen, blood, saliva, and items of clothing where samples have been taken. Because back in the day, where they weren't able to detect these offences, because the science didn't allow them to, the force had to retain these items knowing that one day science will advance and detect these offences. So from a police point of view we have a close working relationship with the forensic science service and we have regular meetings. And on the back of what they do, and their foresight to retain the items, what we've done is, erm, we've gone to our forensic archives department, we've copied every file of every forensic submission that's been made in between 1974 and 1999. So over a 25 year

period, we've copied every file so you're talking 3,500 submissions in relation to sexual offences. So we've copied each of those, and we've had a team since 2005 reviewing those cases which we're still doing now because it's such a big job and see whether there is any potential on those to advance the case. So some of them will be detected, some of them there will be no forensic potential at all but then there's other ones, slides of intimate samples of clothing where there's semen present, or blood which has been sealed on a slide and retained by the forensic science service. So you review the case, and you look at the forensic potential and if there is potential to advance the case, you see what forensic science service have in relation to the case. These meetings and liaisons that we have with them, they then say yeah low and behold we've found these slides in store, crack them open, extract DNA from the semen from the slide or the blood or whatever it is and run it across the database to see if it links to a profile on the database. If it does, and we've got the review paperwork as well and we match it up, we start the case from scratch by building the case up. But sometimes the paperwork you have, sometimes you might only have a forensic submission form, you won't have any original statements because unlike the forensic science service, the police were terrible at retaining material. It was either thrown away into some cellar which ended up being flooded or burnt down or have just been destroyed through weeding policies and that's the way it is. So from the whole ad form, you can look at which doctors have taken samples, potentially which officers have submitted samples to forensic science service. The forensic files that we have got always have the forensic science report in it, so they'll always say 'back in 1974, there was semen present on this item of clothing but I am not able to match it to anyone because we don't have a suspect' because they needed a suspect because they need someone to match it to back then. Erm, so you build it from there. So you'll get your hits, and then you build your case from there and you'll look at your suspect. And one of the first things you have to do is go and see the victim because we are victim led. Once we realise there is some potential to run the case, first thing to do is go and see the victim and see where they are, the lifestyle they're leading and whether they still want to pursue the matter. So it all rests largely around that. So you can do victimless prosecutions but they're not easy. So that's where we would start and build the case around that. They might need re-interviewing by video to get a full account from them, erm, then just get all your continuity statements and corroborative statements and build your case from that. And that's how it works. Clearly, at some point down the line, arrest your suspect and interview them. So that's what we do as part of a cold case.

Would you please be able to tell me about a cold case that you've investigated?

Erm, yeah, trying to think of the most...I'll tell you a really interesting one. When we were doing the review process, it's a bit of story is this. When we we're doing the review process, erm, few years ago now, came across a case that er, related to a girl, a 15 year old girl who had fallen pregnant, and there was some suggestion that father had raped her, and obviously lead to the pregnancy. It only came out when the family, dysfunctional family, the brother ran away from home. And when he got caught by the police and got interviewed, he made disclosures around what had been going on in the family home. The family lived on a notorious council estate, with a large number of children, erm, with all sorts of social issues going on around the family. So the girl was brought in to a place of safety, and obviously spoken to in relation to these suggestions that father had been abusing her. Erm, it was quite obvious to the officers that she was pregnant, er, she denied that father had been anywhere near her and tried to suggest it was a local youth that had got her pregnant. Erm,

when she eventually...ah she had a miscarriage that's right, er, and she still denied any involvement, father was arrested and denied any involvement as well, said it was all made up. When she had the miscarriage, blood samples were taken from the foetus and were retained by the forensic science service and the case was effectively closed. There was no further action taken. She was taken into care, the rest of the family were taken into care, scattered with various foster parents. The parents moved back to Scotland. About 12/15 years later, she goes into a police station early 2000 and makes allegations to police that she's been abused for a number of years, she's actually been pregnant on 6 occasions by dad. Police investigate it, and it appears she's had a baby that survived for 9 months before it dying but during that time they were able to abstract a DNA from the child. Erm, father was arrested again and interviewed and denied any contact with daughter whatsoever of a sexual nature. The police at the time were aware of other incidents and issues that had been raised by her by our force so asked them to conduct an enquiry and establish any forensic potential of the case. The team that dealt with it at the time which were completely unaware of operation recall cold case investigations, weren't aware of the existence of the samples that had been taken from the foetus. It would appear that the baby, that the body had been buried in a mass grave and it was impossible to uncover to uncover that body without having to write to every parent to every child that had been buried within that grave. So there was no further assistance provided; it was just too much of a difficult and sensitive task to deal with. So when the DNA evidence was put together in Scotland, the baby that had survived for the 9 month period, ultimately he pleaded guilty and ended up getting a 3-4 year sentence in Scotland and was subsequently released. I then reviewed this case as part of a cold case in this force, and obviously established blood had been taken from the foetus and we established that those blood samples were stored. So I contacted Scottish police and spoke to the officer that had dealt with it up there who was absolutely amazed and thrilled to bits that he felt there was still potential to sort of look at some other offences. So we liaised with Glasgow, went and spoke to the victim again, and she was absolutely thrilled to bits that there was potential to run some further cases. They effectively got the blood tested and it showed as a match to dad but also because of the brothers and the fact that the brother, erm, there was some suggestion that dad had blamed brother, what had gone on and the fact that he had got her pregnant. So we had to go do some familial investigations around the family, around the brothers as well, to take their DNA to eliminate them from the enquiry. So we eventually produced him to a different prison and I think he was still in prison at the time, and produced him for interview and he was interviewed over 2 days around various other allegations. We obtained all the social care records, took all the statements, and we were effectively interviewing him about 4 other instances of er, rape leading to pregnancy. And various other instances occurred in relation to child neglect and child cruelty, the way were treated at home. They weren't fed, they weren't clothed, erm, you know, it was a horrendous set of circumstances, dad would just lay in bed all day or in the living room, watch tele, and eat and drink to his heart content. He was into old Western films and was right into knife throwing so he'd sometimes have the kids holding a dart board, while he was throwing darts and knives at the dart board. And she actually talked about one instance where she walked into the living room and felt this swish of hair past her head and this knife just lodged itself into the door. And he was just using a bucket as a toilet against the bed, the kids were all going to school hungry, and dirty and unclean. Dreadful set of circumstances. So we produced him and he denied it all completely, despite DNA evidence being put to him. And he remained in custody, went to court and was given 16 years in

prison. So that was an interesting story. But obviously aside from that, I think we've probably counted recently, that we've dealt with 25 convictions on cold case in relation to sexual offences and some really nasty stranger rapes. You know involving women being attacked in their own home, women walking home from a night out and have been dragged in to disused sort of hospital grounds and raped, which have all effectively come from DNA hits which is what we work on.

Has anyone investigated this case previously to yourself?

Yes, I think it was looked at once before myself. But like I mentioned, the police at the time, didn't have all the evidence available to them. Which wasn't their fault, more due to the move of the suspect. It was the DNA from the foetus that really made the case what it was. They were stuck without that really. That's the thing with cold cases, you have to make decisions based on the information you have available when you're doing your review.

So the decisions you have made, why do you think you've made them?

Definitely the DNA, well investigation wise, initially it does. Like I say, you're ultimately being led by your victim. As a team we are being led completely by the victim, so we've got to make sure you're victim is on board throughout. That their feelings and concerns are...because obviously, going and elating and speaking to victims so long down the line, you have mixed reactions from them. Some of them think oh I thought the police had forgotten about it, and then some it absolutely changes their life. It brings it all back to them and it can be difficult, if they've moved on in their lives and they've got new lifestyles, I mean some of their partners may not even know about these incidents. Others point blankly say they don't wanna know, they've moved on in their lives and it's part of the life they've put behind them. We don't get that very often to be fair. Largely they see it as giving them closure. So the influences round cold cases are largely, from our point of view, down to the victim really and [decisions] are led by them. DNA evidence obviously helps massively, but even with DNA evidence, they're not straight forward cases, you've still got a case to build around the DNA and they still go to court and invariably plead 'not guilty' so we still have to put very strong cases together. And don't forget these sorts of cases, cold cases, historic cases, they're front page news. We're often put to right the wrongs of the past really, but it's not always the wrongs of the past in that are the officers who dealt with it. They had limited resources then and different ways of dealing with things. They didn't have CCTV or forensics that we have now to detect cases so it's a lot more difficult for people, a lot more leg work involved. You know it was harder for them then, but there were some wrong-doings as well back in the day, the way victims were treated at times. You know we find ourselves apologising a lot for the things that happened before. They are front page news these cases and there is force reputation at stake, especially with the murders. So you have to make sure that it's right. So yeah, they're strong cases, they are led by DNA. That is damning evidence. But like I said to you, they'll come up with other excuses; they'll say it was consensual or try explain why their DNA was there.

What was your workload like whilst investigating this case?

We'd like to focus on one case at a time but we're not at the moment, we're really really busy. We've suddenly got an influx in cases. Erm, got about 8 cases running at the moment, ones that I've had to put files into and disclosure and prepare for court and everything else you know. So they're all in various stages, but they're all live investigations and they is a

couple of familiar investigations as well as enquiries going out and obtaining DNA samples of people to try and get their families background sort of. So yeah it's busy. There is a lot going on.

Not sure whether you would be able to answer this question as I am not sure of your previous investigatory experience. But during your time as a Police Officer did you have an experience investigating live sexual offences? If so, what do you think the differences are?

No I haven't. I came across things on the VICE squad, erm, because prostitutes would sometimes be complaining about having being attacked. Well the advantage of investigating a live one, is that you're starting from scratch. You're on a blank canvas really and you've just got your victim there, you're full account. We've actually worked on a live enquiry in er, the last 12 months, and with the advantages through time and policing methods and procedures now, that victim was video interviewed from the start. With an old case you're looking at old dusty papers and old statements, you either have or haven't got. You've got officers who are attending the scene, the body video equipment that we can get an account from. Playing it straight away and get an account. You've got CCTV that you can look at which is what we did in this case [the live one] recently. You've got advances in forensics, you've got all the items and clothing that have been seized whereas you're limited with cold cases with what the forensic science service has retained. So like I said, with the cold cases, you're working with submission forms but you're lucky if you can get them really. It's completely different.

How do you decide which cold case gets priority over another one?

Erm it's not my decision. However, it would be risk assessed by a manager so if we've identified a suspect, you'd have to look at that suspect – who he is, where he is, his age, his offending er, and that's how you would prioritise it. So if you had 2 or 3 cases that you got hits on at the same time, which doesn't happen very often, but if it did, you would have to prioritise which one you felt was at the greatest risk to the public.

How likely do you think it is your emotions may affect or influence the decisions you make when investigating a cold case?

I don't think they do really. I mean you can't help but get drawn into what victims have been through. The experience they went through, the time, how they were maybe treated or not treated, and perhaps how the experience has affected their lives. And to actually go to their house and break the news to them that we've detected this case and so see their whole emotions come out and see how it effects them. The only thing we really get out of these cases at the end, well there's two things. Primarily we can put some closure in someone's life and completely change someone's life because it does in so many ways. In other ways, you see a dangerous offender that is put away behind bars. People who are off the radar, who thought they'd got away with it, and suddenly science catches up with them and get caught out. You will get a range of emotions, especially through a case, and bringing it to court. You often battle tooth and nail to get a case convicted at court, even when the evidence is so damning. If at the end of it all you get the result you want, you know, your emotions do spill out, just from a success point of view. But it is for the victim.

I think I already know what you will say to this question, but in an ideal world, what new evidence would you want when taking on a cold case and why?

The DNA evidence. So in our context, we review cases knowing that the DNA evidence might not be there, and we ask the forensic science service if it's potentially available but yeah that is the crux of the whole investigation the DNA and its damming. But like I've already said, they still, once they realise that DNA evidence is on them, they come up with an explanation straight away or they'd provide an explanation once they realise we've got it.

So for the last part of the interview, I am just going to present you with some scenarios. Let's say there were two cold homicide/sexual offence cases, one which was committed in 1998 and one committed in 2005, which one do you think you would be more confident investigating? And why?

Erm... Well to be fair with you, I'd feel confident in investigating both of them. I couldn't differentiate between the two of them. Erm, I mean prioritising wise, I'd probably look at the 98 one first because you're potentially looking at older victims and older suspects so you'd look at trying to resolve that. Mind you, it's not too far back is it? But I'm not sure thinking about it that there was a massive shift in policing investigation tools between 98 and 2005. There might be more CCTV but then you're reliant on that being seized because you wouldn't have that there to look at. So you might in 2005, potentially have more evidence available. But because I'm quite experienced in cold cases, going back to the 70s, I know how to build a case anyway. But yeah more evidence on the 2005 case. Just because of 7 years in advances in policing methods and forensic methods.

Again, you're faced with two cold homicide/sexual offence cases, one with massive media coverage and the other without, which one do you think you would be more confident investigating? And why?

Again, it wouldn't really concern me. You'd look at the victims and you'd follow the same process. Just because it's got more media attention it doesn't sort of detract from the job. I mean it's obviously more known with more attention and it would probably demand a lot more media attention when it gets detected potentially. But you can't differentiate between either of those because you've got a victim at the end of both cases. Just because one hasn't got a big media coverage, it doesn't mean it's less important.

Let's say you were investigating a cold case and before you start, you see the names of the investigators who looked at the case previously and you recognise one to be a very good detective who has a great track record solving cases they look into. How do you think this would affect your review of the case? Would you do anything differently?

Erm... No, I wouldn't because despite them being a very good detective, they can only do what was available to them at the time. Like I keep saying, the advances in policing tools and forensic tools wasn't there back in the day so it might have been sort of niggling at their ego a little bit that they didn't detect it or get to the bottom of it but you'd like to think that if they have worked on that enquiry and you know their capability, is that they've put their ore into it and erm, yeah, you can do the rest.

Firstly, would you be able to tell me about yourself; your service with the force and how long you've been with this current department.

Right, I'm probably similar to everyone else. I'm a retired police officer. I joined the force in 1983 and I retired in 2013. I've basically been a career detective, all my career so. Erm, I've done specialised areas – stolen vehicle squad, counter terrorism unit, HMET, and I've also done divisional CID work as well. So that's my background. I've worked on a lot of homicides in my time. Retired from the police in 2013, and went and worked in civvy street for a while with a job with no responsibilities whatsoever and then out of the blue, we got a letter from the force inviting us in for an open evening, and explained they were trying to recruit 35 ex police officers to reinvestigate cold case murders. And that's it, history. We came on a temporary contract for 12 months, and that became a full time job within 6 months. That's me – career detective with a homicide background.

What is your first initial thought when you hear the term 'cold homicide/sexual offence case'?

Well to me, a cold homicide case is a previously investigated homicide, that's been taken to as far as an investigation is concerned and it has come to a natural halt. And be that whether they've exhausted every line of forensics or investigation in regards to speaking to witnesses. So that's basically what I consider a cold case. And some cold cases have lots of opportunities, others, don't when you come to look at them.

So would your first initial thought be any different when you hear the term 'historic homicide/sexual offence case' for example the historic sexual abuse cases?

It's got to be termed differently because er, historic murders would encompass detected murders you know because they're...I don't know if you're aware but the home office keep stats in relation to every homicide that takes place and they are all historic murders. Part of my role is, I maintain a database of every murder in our policing area from 1946 to current day. And they are all historic murders and amongst those are undetected murders as well. So to me, a historic murder, you know things that are current you wouldn't class as historic but say, 10 years down the line, then I think you are sort of getting into historic.

Please could you explain the process of investigating a cold homicide/sexual offence case?

[Laughter] Now I wish there was an easy reply. Are you aware of HOLMES (Home Office Large Major Enquiry System) and it being an investigation tool? Yes. Not all HOLMES accounts are equal, some are run better than others. Erm, we always like to try and find a closer report because one thing you need to know about when you start a cold case murder is what exactly went on. So you need a summary of some description. What we have been finding is one of the best places to look for that information is the review that was done by the Superintendent while the investigation was still current. So they came in, looked at the processes being used at the time, assessed how things were going, recommendations, but amongst that, a nice summary of the job. Because if you don't understand what's gone on, then it's really difficult then to try assimilate all the facts. Your next job is reading every witness statement. One job I did, there were 600 witness statements to read and summarise what those people were saying, particularly if they were significant witnesses. So that's one part, is assembling what witnesses you have, are there people that stand out from those

witness statements who might be suspects, can you do anything to identify who they are, were they identified at the time and then another part we have is the exhibits. What exhibits do we still have in existence? Sometimes you're lucky and have got 20 odd boxes of all the exhibits from the scenes. You can then go through the forensic submissions, identify if we have anything in the forensic achieve that may assist us and then that's the other side. So we've got the normal policing investigation, which is statement reading and looking for clues, and then the forensic side, because of the advances in DNA technology now, have you heard of DNA 17 and how sensitive that it? So we're now approaching these murders with the DNA 17 head on. But what we are finding is that we're getting idents on them and sometimes it's the forensic scientist themselves, whose DNA is appearing because techniques and preventative measures weren't as good as they are. Some are a lot easier than others, you get some really good SIOs who make the job really easy for you as well because of the way they present and record everything and their policy books. I don't know if the lads have mentioned that, policy books. If you can find policy books or policy logs and look what was going on and thought processes at the time, really do help. I don't think there is any hard and fast sort of template to use, I think each one you've got to approach differently and just be methodical. We all record everything that we do, we all run day books, have you seen the blue HMET books? We all run those, and if you do something on a daily basis, just record it in there. So you're making notes after what you've done. And it gets harder the more murders you've done because you've got forensic work ongoing and then results coming back, so it does make it a little bit more complicated. But the books do help because you can go back and look at your notes, and get back on board where you were on that day and start again.

Would you please be able to tell me about a cold case that you've investigated?

Yeah I'll tell you about the very first one I investigated. In 1992 I was a young fresh faced CID agent when I became involved in this murder, I then picked that up in 2015 as a cold case. So I had some background on it because I did work on it and I worked on the intelligence cell so I had some good knowledge about it. But I re-investigated it, and we're now getting some DNA hits. So the gentleman was a homosexual male, who was very promiscuous and he was found with more than 100 stab wounds in his home address. People were arrested at the time, two were known associates to the male. One of the guys was a man whose fingerprint was found on a radiator within the scene, he then admitted to knowing the victim but not being homosexually involved with him. He was, at the time, a very good suspect. But having reviewed the evidence, it's slightly weakened against him now. But we have got 2 DNA hits, of 2 people of we know. But again, with him being so promiscuous, we don't know whether it's a stain from a previous sexual encounter, or whether it's from a suspect. So we've got decisions to make as to how we progress that. But it was interesting to go back and look at it, because I've come across work I've done! You know, I'd signed it off, when I've been going through it so it was interesting. Fortunately, we've got lots and lots of exhibits for that as well. So I don't know if the guys have mentioned, have you heard about the boxes? And what we've had to go through and the methods? **They've not really mentioned the methods.** We were finding that we'd have boxes of case papers, and then you'd get boxes of exhibits, so we came up with a process of, er, where we didn't open those until we got into a controlled environment, in company with a Scenes of crime officer. We were gloved up, masked up, opened the boxes, and then we catalogued what was in the boxes, and if need be, seal them up properly so that they were in a proper environment to be able to send back to the forensic science labs. Which is a long

process and we've learned from experience. The first ones we were going down and taking like 10 boxes down with us and it was a full day's job. So we then started splitting them down in 3s and 4s, and going down for a couple of hours so it made it a lot easier. But you've got to be good at spreadsheets! If you can use excel, and catalogue everything. You know, record it, and make sure people can find out where it is. Have you been told about the grid 1s? It's the review document itself. Previously, a murder review would be just a document, it would be a document that's printed. We've gone away from that now, we now use electronic documents, and we try to use within that, hyperlinks to other documents that are within folders. Rather than having pages and pages, you just make reference to in and then hyperlink and we're doing that for statements, photographs, erm, videos, we're converting old crime watch videos into electronic files so that they can be viewed. Our thoughts are that we're not going to be here in the future. So someone can come along and not have to do what we've done. They'll know where everything is, they'll be able to look at electronic copies of things that we've highlighted. But yeah, the one I've just told you about was interesting because of my previous involvement. I'm also doing two others at the moment.

Do you know how many have investigated this case previously to yourself?

Well it previously you'd have a Superintendent, who would then have a DI (Detective Inspector) working for them, the DI would have a DS (Detective Sergeant) and a couple of DCs (Detective Constable) so you know, there would be a big review team. And the Superintendent would sign off the review. It would be his document. But he would have people reporting to him. I'm in effect doing the work of 5 people [laughter].

So the decisions you have made, why do you think you've made them?

The biggest decision we've been making and, you don't tend to make them alone, we have weekly meetings with, we have update meetings, we have forensic strategy meetings, but the biggest decisions have been around forensics and prioritising what to do around them. I don't do that alone, I have to get experts in. So we use an area forensic manager, and he looks at the case papers, looks up the exhibits, and makes recommendations, and then we discuss between us the strategy. It's a phased strategy; well normally 3 stages. So we can prioritise what goes first. But they're the main decisions that I've been making, but it is in collaboration with other people.

I know you've already mentioned you have two other cases but what was your workload like whilst investigating this case?

Well we all came with one! Then I was probably one of the first ones to finish a review. Well I got to a point where I was working on a forensic strategy to come back. So while I was waiting for that, I started another review which was an arson. And that's one that's probably going nowhere. It's motiveless. Main suspect has committed suicide, so it's not a good chance it will clear. So yeah some of us have certainly got, at least 2, but even 3 and 4. I inherited one as well, one of the guys who worked in the office left to go to another force. So I inherited one off him as well. Which is difficult because it's somebody else's work so you know, you have to go into the review document to get an idea of what's actually happened. But that's quite easy because you know it's in one place and you can follow it.

Due to your previous service, you have had experience investigating live homicide cases, what is the difference between investigating a live homicide and a cold homicide?

The biggest and obvious one is time. That is the biggest thing. You are certainly under pressure with a live murder, particularly if you've got suspects. Because once they're charged, custody time limits kick in, and the case kicks in, you know the papers have got to be served. And there is definite time limits to doing everything. I've not got this sword of Damocles hanging over me. I've got to get it submitted and I can take my time. But yeah, the time limit is a massive massive difference.

How do you decide which cold case gets priority over another one?

Have you been told about the scoring matrix? An individual came up with the matrix and had certain elements he was looking for in murders – age, sex, gender, availability of exhibits and things like that all came into his matrix. And I think there was about 44 or so murders that were originally identified, and they were all scored on this matrix. So the higher the score, the more dictated the position on the matrix and we're now up to 80 odd murders – 83. And we need to start scoring again, and we've looked at the matrix we've used and it's not really fit for purpose. It could be done better. So the DI (Detective Inspector) is going to be looking at it along with the DS (Detective Sergeant). You need to have knowledge of each case to a certain degree, and what things we've retained. Because you may get a lone female who has been murdered but because it was so long ago and we've nothing stored for it, it would be a priority but actually what are the chances of us actually doing anything with it. And taking it to a successful closure. So they're the areas of the matrix that they need to have a look at. But yeah the original one is when the scores dictated the murders that we got allocated.

In an ideal world, what new evidence would you want when taking on a cold case and why?

Erm I'd love all the exhibits. Really would love all the exhibits. The Management of Policing Information (MOPI) which dictates how long we retain property. As we've been looking at cases, MOPI has come into it, people who have been looking after the property have used that to dispose of things. And they've not properly researched and so things have disappeared and we'll never get them back. So yeah, I'd love every single exhibit to be there.

How likely do you think it is your emotions may affect or influence the decisions you make when investigating a cold case?

*Nope. No. Erm, I do make comments about decisions that were made at the time but that's just different times isn't it. But people behave differently. I think we've moved on and we've improved our processes. **Do you think emotions have more of an effect whilst investigating a live homicide?** I've never been in a position where emotions have dictated the way I've done a job. One of the things that gets thrown back at you, is from people 'you don't believe me' and I used to tell them, it doesn't matter what I believe, it's a case, I investigate, I look for a corroboration and I gather evidence. It doesn't matter what I think. So I try not to get involved emotionally. Emotions do, it happens sometimes after, I worked on a case and was quite upset when I got home. I didn't know the victim but I did her post-mortem [this particular case was a death of a fellow officer] so I was with the victim all the way through to the mortuary and that is upsetting. That's the only emotional side that you feel really.*

So for the last part of the interview, I am just going to present you with some scenarios.

Let's say there were two cold homicide/sexual offence cases, one which was committed in 1998 and one committed in 2005, which one do you think you would be more confident investigating? And why?

I think the more recent one, you've more chance of everything being retained. The case would have been run on HOLMES for definite. So we'd have electronic files. Say 2005, so that's just around when NICHE came in so the crime recording is all electronic so there is a good chance that one we would have everything we needed. The 98 one, I'm trying to think when we started using HOLMES to record exhibits on, potentially around then. I don't know if you're aware but the HOLMES package originally exhibits were run on paper books and then at some point it was run on paper books which were transferred onto the HOLMES package. So there is a good chance that 98, it would have been run on both, I would have thought. So I think the opportunities, again, potentially 98...if you'd have said one in 1989, or 1988, when we were on even more different systems, we were on paper crime reports and then 89, we started with CIS and things started to change. I think with those two you've got a good chance with both really. I have worked on a murder from 1999, and we had everything we needed, as it had been retained. The HOLMES was up to date, and I think on that one, the exhibits were in books. I think there is just a change-over period there. But I'd have more confidence with the later one.

Again, you're faced with two cold homicide/sexual offence cases, one with massive media coverage and the other without, which one do you think you would be more confident investigating? And why?

It depends on the type of murder. Some get little coverage and really should. I don't think it would influence me or determine which to give priority to. You know, a homicide is a homicide and hopefully detectable. Most murders anyway, they do tend to get in the press, and if they're undetected then it's a good chance it goes further, that they're on crime watch and other programmes. I don't think it would make a difference.

Let's say you were investigating a cold case and before you start, you see the names of the investigators who looked at the case previously and you recognise one to be a very good detective who has a great track record solving cases they look into. How do you think this would affect your review of the case? Would you do anything differently?

I've looked at jobs that have been reviewed by SIOs who you think "wow" and then others who have got a track record of undetected murders. But when you look at the case, you understand why it was undetected. Sometimes you're lucky and you get all the clues, sometimes, they're not there and you'll never find them. So I don't think it would influence me in the way that I would look at a job. I think each case you just come in and start again and look. Hopefully, they use some good ideas as well that you think yeah I totally agree with you, that was a good line to go down. We used the Trace, Identify and Eliminate (TIE) method. For example the arson I mentioned, they decided to go and find all the people with convictions for arsons in the area, to ask them, where were you at X time, on X date, and can you account for where you were? And then from that, start eliminating people from the enquiry. Unfortunately on this occasion, the perimeters of where were you at 2am. What were the answer you think they got? Yep, I was in bed, asleep. Who can verify that? Yeah so, sometimes TIE, it flawed. You've got to really look at the perimeters if you're going to use it as an investigatory tool. Because HOLMES codes that, and you start looking through suspects and you're looking for people who are eliminated or who haven't been eliminated

and when you start going in and 6 would be not eliminated. So sometimes, everyone has a 6 [laughter] so what was the point in you doing that TIE.

Appendix Twelve – Interview F

Firstly, would you be able to tell me about yourself; your service with the force and how long you've been with this current department.

Okay, I joined in 1981 and worked for 32 years, retired, and after a year's retirement, I thought "I can't do this" so I came back as a duties clerk to start with and did about 12 months there, then went into Safeguarding as an Investigative Officer and then I've been on the cold case review team since September 2015.

I was a police officer and obviously worked my way through from uniform and then joined CID, couple of time outs for training and things. Did HMET, had a break and then went back to HMET. But general CID and stuff before that.

What is your first initial thought when you hear the term 'cold homicide/sexual offence case'?

A cold homicide case means to me that it's a, obviously a death of somebody, that we haven't got a suspect for or has not been taken to court so therefore it's undetected. So it needs a review of what the investigation was at the time, and see if we can move it on now. There is no time constraint, as long as all the enquiries have been done and you haven't got anywhere, then yeah, it's gone cold. Doesn't have to be old.

So would your first initial thought be any different when you hear the term 'historic homicide/sexual offence case' for example the historic sexual abuse cases?

It's different. There are two sides to our department, one does the historic rape investigations and the other do the historic murders. Historic can be anything that's happened in the past be it 12 months ago, which is unusual because you'd still have a live investigation if you like but anything that's happened in the past.

Please could you explain the process of investigating a cold homicide/sexual offence case?

Okay, well that's not quite as simple because I have 3 cases ongoing at the moment, one is from 1981, one is from 1996 and one is from 2004. So 1981, the practices back then were nowhere near what we've got now. So everything is on paper. A lot of practices I didn't understand because I didn't go into an investigative role when I first joined. So it's a case of finding out how much of that case still exists in exhibit boxes and what have you, and then working your way through everything that's in those boxes to see what you've got left. The 1996 case; not so much on paper, there is a HOLMES account, so I've got a computer base to go to for that. Then 2004, a lot of people are still working within the force that originally worked on that case. So you can take various, different...it sort of generates a different approach depending on when the murder happened.

Would you please be able to tell me about a cold case that you've investigated?

The 1981 case is quite an unfortunate case really. The victim is a male in his 40s, who had learning difficulties, and he'd had quite a traumatic life really, and he was an illegitimate child. He spent a lot of time in institutions throughout his life until about 18. Couldn't really hold down a job, but managed to get to 46. Was working as a glass collector in a pub, finished his job at around 12:15am then walked the 30 – 40 minutes home. On his way home, he encountered somebody, we don't know who obviously, it wouldn't be a cold case if we did. Stabbed 22 times, and we never caught the assailant. When you first look at that particular case, with forensic evidence, you would think, why on earth is this unsolved? But it's like everything seems to be going against him, from the day he was born...reviews have been carried out over the years, but in 1996 the review was being carried out of the

various forensic that was gathered at the time, and then the lab had a fire and a lot of it was destroyed. So on the face of it, you think, loads to go at here, but there actually isn't. So I'm still working on that. We've still got his clothing so I've managed to submit that, his shoes, still got them murder weapon because that was found at the scene and that's gone off for further work to be done. Taking into account the advances in science since 81. Which we'd never even heard of DNA then so fingers crossed.

Do you know how many have investigated this case previously to yourself?

Erm, it's had probably 2 reviews. The investigation in 81 only lasted about 4 or 5 months. Then the review in 96 is where we lost the evidence at the fire, and then reviewed again in 2003. But obviously from 2003 to now, you've got again, advancements in science.

So the decisions you have made, why do you think you've made them?

The DNA. I cannot believe for one minute that there isn't something, somewhere, in this evidence that we've got that can't point us in the right direction. And for somebody to carry out such a horrific attack on a vulnerable middle aged man, he and it is a he, as there were witnesses to the attack, must have come to our attention somewhere along the line. So you just got to keep going until you've exhausted absolutely everything and I won't give up. Because I can't believe there isn't something in there that will solve it.

Obviously you mentioned you were looking at two other cases as the same time, is this your normal workload?

Erm, it will depend on the case. So I picked up one case of a female victim, another awful case. She was 20 when she died, she was found in 96 in a railway station, burning. She was dead before she was set fire to. The last time she'd been seen was 10 days previously in a pub. Where has she been for 10 days? Why does she suddenly turn up then? And you just think why? Yeah she was alcoholic, yeah she'd spent quite a considerable amount of time prior to her going missing in the company of her dad, as they were drinking partners. But the difficulty with that one is, that all the people who she associated with were all alcoholic, including her dad. So people's recollection of what happened now, never mind what happened from the day she went missing, trying to recall that 10 day period was difficult as well. But still, you still keep trying.

Due to your previous service, you have had experience investigating live homicide cases, what is the difference between investigating a live homicide and a cold homicide?

The main difference for me is that you're immersed in it from a live perspective, so every day you eat, you live, breathe it. Briefings morning and night, you get a feel for a job. Whereas a cold case, you're starting from day one. There is none of the banter going on in the office, none of the suppressions – "I think this, or I think that". It's you. And you are trying to wade your way through the evidence that started on day one, and 3, 4, 5, 6 months later and it's finding the starting point to me, and working your way through as chronologically as you can. Briefing notes are brilliant, because people say what they think in a briefing and hopefully if it's been noted down properly you tend to get a feel for what the thought process was back then. Even though you've still got to, as it's quite clear that certainly in some of the other cases that I'm not dealing with, that they get blinkered. So they set their sights on "I think it's him" the whole enquiry kind of closes down into thinking it's him and they don't keep an open mind. You try as a reviewing officer, from a cold case point of view, try and open your mind. Whereas with a live one, as I say, you're sort of with it all the way through. You're talking to live witnesses who are emotionally involved, whereas

20, 30 years down the line, you're talking to emotional people as they've had it to live with for all this time, but, it's not current.

How do you decide which cold case gets priority over another one?

I don't know if there is a decision, as such. Erm, why did I end up with these people that I've got? The 81 case has potentially got more forensics, so the potential for a detection is there. The 96 one, came about as a result of a case I did work on, a live case that I did work on. That er, it was another female victim that was kidnapped and found murdered in 2004. The suspect for that, and I worked on that enquiry, he'd never come to our attention before in his life until that point. We looked back over the cold case murders that we had already got, my 96 female being one of them, and the potential for him to have committed it. So I think that's why that came to the forefront. Then the other one, it's a big job, that's not that old, that the potential again for that is that the advances in science since 2004. I suppose so the way that we're thinking of it is, is detection potential. Which is terrible isn't it. I don't know whether it should go oldest to newest or detection potential or I don't know.

In an ideal world, what new evidence would you want when taking on a cold case and why?

New evidence? Well in my cases – the 96 one, I have got new evidence and it's because the pathologist at the time who carried out the post-mortem on the victim, bear in mind she was unrecognisable, and a lot of things have been destroyed on her body, that the internal swabs that were taken from her, he took four high, four middle and four low vaginal swabs and for whatever reason, three of the high vaginal swabs went off to the forensic achieve and we never looked at. So I've looked at them, well the forensic has, and he's found a sperm head on one of these swabs so, you know, I was doing cartwheels round the office. You just think 'that's what I want'. Now whether anything will come of it...but, it's something I didn't have before. So that's the beauty of it. We are a dedicated team to reviewing so we're not doing it in and among everything else, so we can afford the time to it. People out there are jealous to death because they're running round like headless chickens but we get the time, and when you've got the time, you can devote absolutely everything and you can review absolutely everything. You don't just pick and pike out one enquiry and think oh that might have potential or that might, you look at everything and that's what has happened here.

How likely do you think it is your emotions may affect or influence the decisions you make when investigating a cold case?

Erm, if you didn't become or didn't have any emotions whatsoever, you'd be a robot. So you've got to feel for, like the victim in the 81 case, I mean, that's such a sad set of circumstances that you've got to feel for, for the family that have had to, I mean 1981 that's 36 years ago, that's a hell of a long time! He only had a half-brother and I know his half-brother is still alive but he was fostered so the foster parents aren't around any longer. So you've got this half-brother who wasn't emotionally attached to him, but still for the victim's sake, you still want to find the person. And of course, you've got a murderer out there and you don't know who he is.

The other case (1996) the victim lived in the area that I now live in, so there's that connection if you like. Her parents are still alive and she's got siblings so you want to do it for them as well.

Then the one in 2004 in which a wealthy victim was murdered and his family suffered in the ordeal too, so you think we need to find who did it, and we think there is a kind of a suspect for that, that they thought of at the time but they just can't get the forensics together for it.

So you've got a suspect there who is a nasty piece of work that you'd just like to sort. So they're very varied the different cases but, I suppose the emotion is, I've been a detective all my life practically and I want to get an end result because that's all we do. Job satisfaction really.

So for the last part of the interview, I am just going to present you with some scenarios. Let's say there were two cold homicide/sexual offence cases, one which was committed in 1998 and one committed in 2005, which one do you think you would be more confident investigating? And why?

Ooo, 1998 and 2005? So 2005 HMET had started in the March, so you would hope that the 2005 investigation, dare I say this, more competent than the 1998 one. So I would feel competent in investigating them both, but my potential for things been missed would be more in the 98 one than the 2005. It doesn't always follow but that's my thinking.

Again, you're faced with two cold homicide/sexual offence cases, one with massive media coverage and the other without, which one do you think you would be more confident investigating? And why?

I don't think it makes a difference. You can have more muddy waters with a high media coverage and if it's not really been out in the public domain much, I mean it's unusual that you wouldn't get any, but erm, it doesn't make any difference.

Let's say you were investigating a cold case and before you start, you see the names of the investigators who looked at the case previously and you recognise one to be a very good detective who has a great track record solving cases they look into. How do you think this would affect your review of the case? Would you do anything differently?

It wouldn't affect me. And no I wouldn't do anything differently. I wouldn't trust, whatever I think of that detective, I wouldn't trust what work had been done at the time, for it to influence what I do now. It just wouldn't.

Appendix Thirteen – Interview Q

Firstly, would you be able to tell me about yourself; your service with the force and how long you've been with this current department.

Yes, I retired last year having done 30 years as a police officer and retired as a Detective Sergeant with the homicide team. Erm, had a little bit of time off but not much, only had 3 months and I started staring at the window and decided it might be worthwhile me going back. When you retire, you meet the Chief Constable for tea and buns and I got chatting and the Chief said it was a bit of a waste really. We train you up all these years, spend thousands of pounds on you and then suddenly at the end of a Friday, we say stop. So I came back. I've been back about a year now as an Investigative Officer on the cold case homicide team.

What is your first initial thought when you hear the term 'cold homicide/sexual offence case'?

I think it's the wrong term to use. Because "cold case" tends to suggest that it's gone cold and we're not doing anything with it. And that's not true. So we shouldn't really use that. It's a major investigation review that we're doing. Because, as you're probably aware, a murder is a murder and it will remain a murder until it's detected, or proved not to be a murder. So that's how I see it, usually a murder investigation that's been er, actively investigated that has come to a point where a senior investigating officer has probably said we can't take this any further at this time. And its 'at this time' that are the magic words really because as you're probably aware also, with the advances of forensic science what we did in 1992, we can do a heck of a lot more now in 2017. So that's basically what our role is, to review a murder investigation, see what went right, what went wrong, what lessons could be learned, and what else we can do with that investigation now what we couldn't do then.

So would your first initial thought be any different when you hear the term 'historic homicide/sexual offence case' for example the historic sexual abuse cases?

No it's exactly the same, I mean you don't like to categorise offences but I would have thought that sexual offences and murders are the most serious things the police service deals with and quite rightly so, because that encompasses all of your CSE (child sexual exploitation) things, trafficking, all comes under one envelope for me as where's your next murder going to come from? Somewhere from that vulnerable adults, vulnerable children. Erm, yeah I suppose historic simply means that it's a murder that took place some time ago, I don't know how long; some of our murders happened 4 years ago, some of them happened 40 years ago.

Please could you explain the process of investigating a cold homicide/sexual offence case?

In my previous life, erm, I would have been the team leader, the investigating officer for murder. Last night, somebody got murdered and I, and my team, come along in the morning, would start investigating. And the questions our exactly the same that I've got for a live murder, as I've got for a murder than happened 10 years ago. That's what's happened, where it's happened, how has it happened, and what do we know so far, what have we done about it so far. Obviously secure the preserved evidence we can do. Just going through the major investigation manual, but for a historic murder. So it's the same really. We're not really good in the force, well in the police service nationally I don't think, as storage. I'm sure

some of my colleagues will have mentioned the appalling exhibits that have been wrapped up in cardboard boxes, boxes will cello tape wrapped around and then they'd be placed somewhere unsuitable, boxes have collapsed and things have rotted, because it hasn't been packaged correctly. So the other thing we've got to consider is what have we got left, what have we got now? Erm, one of my cases, involved storage of a massive amount of exhibits stored in a place that was stored next to a river and then the river flooded and half of the exhibits disappeared down the river. But it's one of those things that we don't seem to have quite right yet. Usually because of cost, it's down to money I think. So yeah, that's what I would do first of all, erm, here's a murder, the operational name, right, what happened – so you start reading, your witness statements, read any of your briefings because all the briefings are recorded on a live murder investigation and put on to the HOLMES system so you can work out what the thought pattern was of the senior investigating officer (SIO) was on 09:00am the following morning. That's your number 1 briefing. Here's what happened, here is a summary of the events, and here is a list of directions I want to go in. You tend to sort of follow that, and work your way through that to see whether they actually did that. Was that done? You know they've given an action to see so-and-so and eliminate them from the enquiry and I'll find that a number of so called eliminated people... "he's eliminated" well why? "his mum says he is at home" well that's not eliminating somebody is it? [laughter] You know if his employer says he was at work, and he has the work records to prove that, you know...so you get a lot of that; are they eliminated or not but when you're talking about 100s and 100s of people, at some point, a SIO has to say no that's physically impossible for us to do so we have to narrow that down, which is where you start getting your policies from a Superintendent. I want you to look at people of this age range, this description, and try and narrow that workload down because you can very easily get bogged down in following false trails. Then you look at the forensics, and you look at what you've actually got to work with forensically, and then we have a forensic review. We're getting a better working relationship with scientific support as it wasn't particularly good when I joined last year. But that's getting put in place properly now. PCC (Police Crime Commissioner) has given us some money so that's always good. We've also got scientists reviewing the really old exhibits. I don't know if anyone has mentioned about the archives? So if you take a swab from a deceased body, they can retain that swab, and retain the culture from the swab and they basically seal it in wax and that's never disposed of. Hopefully. So even though 50 boxes exhibits have gone down the river, they may have taken a load of samples from the deceased and we've got them down there [the archives], let's look at those again, and see what we can get from them.

Would you please be able to tell me about a cold case that you've investigated?

Yes, erm, proviso as I said before we started [no names etc]. The one that I am working on now, is of an elderly lady that was murdered in 1994. Horrific murder to be honest, she was in her 80s, someone has gone into the house, through either an unlocked door or been invited in. She was then strangled, stabbed and raped. Which is just too unspeakable to think of. Two weeks later, there was another murder of an elderly lady, in her bed, at night, a mile away. Understandably, everybody said charge over there, because they got the person that did that one within a few days, it was a neighbour. He was charged and got convicted of murder and he went to prison for the murder of the second victim. The assumption back in the day was well he's done both. It's a mile away and there's so many similar facts so he's got to have done that one. Four years looking at that and they

eventually charged the individual with the murder in 1994. It went to court and the judge threw it out for the simple fact that they didn't have evidence, just similar facts. Just because that lady was strangled doesn't mean to say that the same person did both. If he'd have etched 'Zoro' on the wall, now you're talking similar facts. Or signed a piece of paper in blood or something unique and so rightly so, I suppose, that it was thrown out. We then review this case, back in 2010 or 2011 and they managed to obtain, what's called a WSTR profile which is a new DNA profile of potentially the suspect from what we call a sex swab. Because of what it is and because it's fairly new, and so minute, we cannot search that on the DNA database. So what we've got is an unknown DNA of an unknown suspect. What we can do though, is get the other murder's DNA and say 'can you test that against that'. Guess what? It aint him. So I've picked this job up last year to look at it again, and I've looked at it with a fresh pair of eyes. Because at the time it was a case of well that guy must have done it so let's review it again looking at all his friends, because maybe he went with another. Well I can't imagine that two people would go into a house and one would watch while the other one strangled, stabbed and raped an elderly woman. I just don't believe that. We're talking about some right old weirdo here. Some very odd individual. No sign of a burglary, not a great deal stolen, if anything at all. No draws open, no wardrobes open, I think this is a sex attack which has resulted in a murder. So I've gone back in and basically told them, the senior officers, I think you're wrong, we shouldn't be looking at that, we need to start all over again. What we've got here is a brand new undetected murder that he didn't do. So where do we go from here? So that's what I'm on with at the moment, looking at all the people that came into the enquiry looking to find out whether I have to go and get a DNA swab from however many people because even though they might have given swabs in the 90s, if it's on the database, we can't check it. The only way to do it, is to have another one. So my job at the moment is to narrow down that and erm, the anniversary is coming up in a couple of weeks so we're also going to do a renewed press appeal and we've got some very very good e-fits of two unsavoury characters who were wondering around that area, at that time, that were sort of looked at in the 90s but we overlooked as it was a 'don't look too hard on them because he's done it' and that's what I'm doing at the moment and it is fascinating. Erm, with this organisation change so much since the 90s, it really has, and looking at some of the qualities of the reviews done then. I don't say that critically, I say it as that's what officers did then. Nowadays we wouldn't dream of doing that, we wouldn't dream of interviewing somebody unless it was a specialist interviewer who deal with victims of sexual crimes, instead of just taking them into a room and talking to them, you know, there are protocols that everyone follows now. All for the better, I have to say. So yeah, it's very interesting but it's a lot of work. And the other problem I've got is that, it's me, me and me, not me and plus 6 DCs [Detective Constables], plus you can do the exhibits, you can do this and you can do that, it's me. So things don't happen as fast as we'd like them to. And some of them, erm, they are quite fascinating some of them, like the old murders that we've got, we're never going to get a detection from it, because we've got nothing. Unless somebody on their deathbed said, right it was me, it's never going to happen because forensically it won't happen, the witnesses have either died or renewed press appeals have failed, or even, was it actually a murder? And I'm talking there about things like house fires, you know, fire inspector might say ya know, I don't know what it is so therefore it's suspicious, doesn't mean it's suspicious. So that's what I'm doing at the moment. Amongst other jobs.

Do you know how many have investigated this case previously to yourself?

Depends what you mean about investigated. I mean what I'm doing now is nothing like what was done in the past. I'd probably say 1 or 2 people have looked at the case and certainly nothing from...well that was 94, they got this lad and charged him 98, 99 and then I think in 2000 he actually appeared in court and it got thrown out by the judge. So from then until about 2008/9 I don't think a great deal was done with it to be honest because the view was, well we've got the guy, we just can't prove it. There are some other issues in this job too, and that's by the by.

So the decisions you have made, why do you think you've made them?

Oo, good question. Erm, I purposefully picked that job up, and ignored all the school mentality, the old school, macho, senior investigating officers "I'm in charge" we're all going to do this and I deliberately took the view that that's not this kid's DNA. If it's not his DNA then he hasn't done it. If he hasn't done it, what have we done about it being somebody else? So I've actually started, I've looked at, what did they do on those first 13 days with this job. I've looked at the key witness statements again, and that's where I've got this work from. Go back to basics, the old story of clear the ground beneath your feet first is what witnesses have we got. Near to where this lady lived, and then what have we got...I've got 16/17 statements, ones who haven't been given much credence, but who all talk about "well I was washing my car, and I know the lady really well and she came back to her house and then nothing really much, can't really tell you much. A bloke walked down the road and on some occasions, the officers" hang on a minute, what did you say? And a description appears, a very brief description, but again 2017 we'd have 5 pages of description, because we would literally explode it. Back then we'd get white male, okay that narrows it down, and then another witness who said that "I was playing football with my mate, and this lad jumped over this wall, dunno who he was, never seen him before, do you remember much about him? No not really, just a white bloke, oh well he had spots, what do you mean spots? He had spots on his head. Where? So we've got a white male, we've got spots on his head. Then I get another witness, who talks about somebody who has brushed back hair, greasy. I then look at statements from people where other incidents happened, the night before, half a mile away, a couple of nights afterwards, which involved some weird incidents, some bogus official types. Elderly people being approached by spotty faced, and greasy hair, and was wearing a black jacket, erm, looked like he hadn't had a decent meal in ages. Erm, and he's with this other lad, I remember he had a faded denim jacket on and his nose was all squashed. Not sure if it was him that had spots or the other lad. But then got another witness who mentions about a pale blue denim jacket. That kid playing football said when that lad jumped over that wall, there was another lad that looked over the wall and he had fair spikey hair and this faded denim jacket on. So all of a sudden I'm starting two pictures here, of two people that were seen within 10 feet of the door of this woman's house, at around the time that she may have died, who were also involved in going to or visiting elderly people's houses, days before, days after. Not very far away. And they've never been identified. So I've gone down the route of stop all that nonsense. Let's clear the ground, who are these two? So that's going to be part of the press release in the next couple of weeks. We've got some really good modern day e-fits.

What was your workload like whilst investigating this case?

No I have got another one, another murder investigation, which to be honest, has been taken as far as it can do really. It's an accidental shooting believe it or not, if there can be such a thing. Two old villains, quite a few years ago, got out of prison, decided they were going to assert their authority around their area, and started doing various shoot 'em ups at various other villains in the area, like they do. And they decide to do this one night, and on the way back from it, they run through a garden and jump over a fence at the bottom of the garden not realising there's a 7 foot drop at the other side. So villain number 1 goes over, followed by villain number 2 with another bang. And then witnesses say they see a male, villain number 2, panicking like mad on the driveway and then runs off, leaving villain number 1 on the floor with a big hole in the back of his head. And he'd actually shot him by accident as they jumped over the fence and he's carrying the gun. Villain's family say don't come to us, we're not telling you anything. In fact the words they used were "works accident and no I'm not going to help you". Nobody wants to talk to us, all frightened of them. To be honest, that one forensically is not going anywhere because, what happened happened, the lad that's responsible completely disappeared off the face of the earth for nearly 20 years. He's either propping up a bridge on the M5 or he's out of the UK. Because he's moved out of the way. Have you realised who you accidentally shot? Don't come back kind of thing. So that one is sort of, there isn't a great deal further you can go. There are very very few witnesses that would even speak to us about it because of who it involved. And the anonymous reporting side of things has given up nothing, again out of fear more than anything else. Erm and I'm doing another job with a team of officers, that's er, fascinating really. It's one I started before I retired. That one's been in the paper. That's coming along nicely and that's about it. I say that's about it but that's a lot. Well you've got to review for example, the second job I mentioned, 26 boxes full of exhibits and when I opened them all, they had nothing, they were nothing like what was supposed to be in there. And this is where people over the years have just shoved stuff in boxes. So you've then got to categorise all that, then got to review it, see what worth it is to anybody. Erm, the HOLMES accounts are massive. They're huge. It's like a giant electronic waste bin where everything's been thrown in. And then you've got to decipher that, pick out your witness statements, read them, then go and try and find witnesses, that's another one that's, you know, as you're talking of years gone by, people are dying! The other one [in the paper] was 1965! So the amount of witnesses left for that, it's virtually 0. So the workload is quite massive. There is an issue we've got, and I'm sure we've got it all over the country is we're called a 'review team', we're not called an investigation team. There seems to be a very blurring of the lines there because we can review it, but our recommendations would be this work needs doing. And what we're trying to do is do it [the review] and do the work. And reality, if we're doing that then we're not doing that [the review]. Which, I don't mind. But some of my team are not happy with that because it's confusing – well do you want me to do that or not? You know. For example, we've now got Investigation Officers, do I have the power to do that anymore? Because a lot of the stuff, we can't do. We can't do and knock on the door and arrest somebody anymore. So there is more work to be done on that I think.

Due to your previous service, you have had experience investigating live homicide cases, so other than the fact the live homicide has just happened, what is the difference between investigating a live homicide and a cold homicide?

It's always time. There's never enough time. Erm, you've got that golden hour rule. As each hour goes passed you've got less chance and less chance of getting hold of a

witness. I'll give you an example, years ago, was a shooting in a city centre nightclub, two rivals fell out and they came over. There must have been about 500/600 people in this club and bang bang bang, the shootings going off in the club. Cops get there, and there's 500 people trying to leave the club. That's 500 witnesses to murders who are all trying to get passed you, what on earth do you do there? Erm, and it was a really good, quick thinking bit of work by an old mate of mine who shouted up for help and got a load of uniformed police officers there and basically made corridors out of the club. And as each one of these people came out, the cops grabbed hold of them, what's your name, what's your telephone number, where do you live, and then go back and talk to them. Erm, but there's a lot of pressure on you. The worst as a DS (Detective Sergeant) the hardest bit is when you get your prisoner. And you've got 24, 36 hours and you're still trying to build your case, you're still trying to track down witnesses. Because nine times out of ten, we get the bad guy, within hours, days tops, er, so you're under pressure to – I need all those statements doing, I need Mrs Jones in now, I need Mr Smith seeing right now because I need that to go with this person in custody. The clocks ticking, interview teams to interview. You're running out of time, what else do you want to talk to them about? Are we going to get a charging decision? And there have been many many occasions that at half past 3, 4am, in the morning I'm trying to ring a lawyer to explain over the phone, why this individual needs to be charged with murder. And that's the hardest part, it the time. As an officer on the case, once that murder happens, you're off and running. Whereas these kind of work, nothing spoils if we do it tomorrow. You know, we're not going to lose forensic evidence, we're not going to lose witnesses, although, we can always argue well if they were that important why didn't somebody see them 4 years ago or 8 years ago. If they knew that somebody was elderly then why didn't they make sure that belt and braces that witness. Erm, but it's a different kind of job, it's a different kind of pressure. You're still expected to do as much as you can, and personally, I think there are things we can do as well as reviewing it. Some stuff we can't because we're not allowed to, and not all investigators are ex police officers. So it's easy for me to sit here and say, because I've done it, it's like water off a duck's back. There's a lot of new joiners to this organisation who have never been a police officer, and in theory, here is a murder...well what do I do with that? And they couldn't do it because you've got to have that investigative skills and training to be able to say 'I'm now going to investigate a murder'.

How do you decide which cold case gets priority over another one?

No idea. I don't really ask. I assume the SIOs (senior investigating officers) when deciding which one they want us to look at next which is a considerable amount, and make a decision. **How do you think it should be decided?** Oh dear me, I don't think you can. Because until you review it, you don't know whether actually you can do a load of work with it and detect this crime. You want the ones you can detect. But until you review it, you don't know. Some I suppose have a lot more information than others, so you've probably got a better chance with those than others like one from 1942. So I don't know, there will be a criteria for it, but I'm not personally involved in that. However, one of my colleagues who you're speaking to in a while, will have the answer to that.

How likely do you think it is your emotions may affect or influence the decisions you make when investigating a cold case?

I don't think they do. Well it depends what you mean about investigating. Effects more live jobs. It's very difficult sometimes to not get emotional in some of the jobs I've dealt

with because you think you're super tough and you've seen it all. I have to deal with a job once where two family pets, dogs, on a really hot day, started fighting with each other and in the middle of them was the 2 year old child. And basically, one of them attacked the child, and bit its head off. I get there and it's like a war zone. And dealing with that was pretty horrible. But you've got to deal with what it is. And you do, you get really cynical and hardened to it. But emotionally, [on cold cases] you get a little bit annoyed sometimes. A young lad that got murdered in some flats, 2 years ago, had learning difficulties, and actually if the support agencies had done their job, he'd be alive now. And he got murdered because they left him alone, and he got preyed upon. I'll give you an example about how bad it was; this fellow had something called spondylitis which is basically a curvature of the spine, which meant that he spent his life, like that [demonstrated being hunched over]. To help him and his security, they decided to put a spy hole in his door, that was nearly 6ft high up the door and this is a fellow who spends his life like that [hunched again] and it's up there [referenced to above his head]. So how on earth can he look through the door? Things like that get you annoyed. Well I mean, emotions effect people differently don't they? So some people...I'm a bit old school, you know you tough it out. Still go home on a night and think 'Jesus, what have I been doing?'

In an ideal world, what new evidence would you want when taking on a cold case and why?

Well everyone loves forensic evidence, because it's hard to argue with it. You can't beat a bit of science. Then again, you can't beat a witness who comes forward, who says 'I wasn't going to say anything at the time, but it was a few years ago, old elegances have gone, and I want to tell you now'. You want the best evidence, and the best evidence is a witness. So we can prove what they're saying is true. If you get that backed up with forensic evidence, you're laughing.

So for the last part of the interview, I am just going to present you with some scenarios. Let's say there were two cold homicide/sexual offence cases, one which was committed in 1998 and one committed in 2005, which one do you think you would be more confident investigating? And why?

Well it would have to be the latest one for the simple reason that the technology. You've probably more chance...you'll have better statements, better witnesses, you'll have had better witness briefings, you'll have had better scene management. As the years go on, we get better and better. Back when I joined in the early 80s, it was incredible, now the technology kicks in straight away, everybody seems to know when they're doing immediately, well since we got HMET in place anyway. And the quality of the evidence has vastly improved. As the years go by you would, selfishly, always want the most recent murder because hopefully it's been dealt with the most professionally.

Again, you're faced with two cold homicide/sexual offence cases, one with massive media coverage and the other without, which one do you think you would be more confident investigating? And why?

I don't think it matters. It's not for me, in my current role, to be dealing with that. Because that's a matter for an SIO to deal with the media. It's irrelevant, well not irrelevant, because they are very helpful on occasions, we have to work together. The fact that it's taken massive media coverage, the Politian's decide that. That's fine but that's not for me,

without fear or favour really. So yeah, it wouldn't make any difference to me. Not in the slightest.

Let's say you were investigating a cold case and before you start, you see the names of the investigators who looked at the case previously and you recognise one to be a very good detective who has a great track record solving cases they look into. How do you think this would affect your review of the case? Would you do anything differently?

No because I'm fantastic [laughter] at my job and extremely confident, erm, wouldn't affect me at all. It's nice to see names you know, that you've worked with in the past, good detectives, but it wouldn't make any difference to me. You can't do that anyway, you've got to go in with a fresh mind, and a fresh set of eyes, because that is how things can be missed. Sometimes people's decision making is tainted by what they're hearing from their colleagues and what managers are saying to them. Then you go in oh look there's been a murder, it happened 20 years ago, however, as far as I'm concerned, it happened last night, let's have a look at what we've got. It wouldn't phase me anyway, let's put it that way.