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Cognitive and emotional stressors of child homicide investigations on UK and Danish police

investigators

Roach, J.; Sharratt, K.; Cartwright, A.; Skou-Roer, T.

Abstract

In a previous paper, key differences in the form and manifestation of cognitive and emotional

stress experienced by investigators of adult and child homicide were identified, along with a

cursory look at how investigators commonly deal or cope with these effects. In this paper, the

findings from eleven interviews with UK and Danish police officers with experience of

investigating both adult and child homicides, suggest that child homicide investigations can

have a profoundly different effect on police investigators that can vary between officers. The

effects experienced and coping strategies employed were similar among officers in Denmark

and the UK, and these included becoming more emotionally closed and engaging in regular

sport and exercise. The findings hold important implications for police training and for the

welfare of current and future police homicide investigators particularly where the victim is a

child.

Keywords: Police, Child homicide, Criminal investigation, stress, Coping strategies

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Introduction

Although the public may find police work glamorous and exciting, particularly that relating to homicide, evidence indicates that police investigators do not (Huey and Broll, 2015). Indeed, most police are far more exposed to acute and chronic life stressors at work and consequently are at greater risk of developing symptoms of poor mental health including; anxiety, depression and Post-Traumatic Stress Disorder than those in other professions (Anshel, 2000; Kohan and O'Connor, 2002; Violanti, 2005). Particularly those who investigate homicide (Roach, Cartwright and Sharratt, 2017).

The present paper builds on the findings of a previous study that identified common effects experienced by police investigators involved with homicide investigations (N=99) (Roach, Cartwright and Sharatt, 2017). *Cognitive stressors* identified included intrusive thoughts, a preoccupation with a case and the influence of cognitive bias, with *emotional stressors* including disrupted sleep patterns, low mood, and feelings of intense emotional pressure to resolve a case for the sake of a victim's family. From interviews with a sample of UK and Danish homicide investigators, the present paper explores qualitative differences in both the form and intensity of different cognitive and emotional effects experienced by homicide investigators depending on whether the victim is a child (or children) or an adult (or adults) and examines the ways in which investigators deal (or cope) with these. We begin with a brief discussion of the research literature pertaining to 'stressors' identified in police work and criminal investigation.

Wellbeing and the police investigator

Much of the existing literature on police wellbeing can be categorised into two areas, the first being the impact of organisational stressors, for example bureaucracy, and its effect on wellbeing (Violanti et al., 2017) and the second being the impact of different operational stressors linked to various roles and functions within policing. Operational stressors more commonly refer to the nature of the police work, for example being exposed to traumatic events such as Road Traffic Collisions (RTA) or incidents of Domestic Violence (DV). This is the principal focus of stress generation explored in the current study, primarily the cognitive and emotional effects experienced by police homicide investigators. To our knowledge operational stress remains an under-researched area of the cause of police stress when compared with organisational factors, such as the allocation of resources and wider working conditions.

Such stressors can certainly negatively affect officers' wellbeing with, in the most severe of cases, continuous exposure to traumatic events resulting in individuals experiencing depression or post-traumatic stress disorder (Greenberg et al., 2015). When one considers the common operational duties of homicide investigators, then it is safe to that the danger of exposure to both primary (e.g. being continually exposed to the death of a human being) and secondary trauma, which occurs through indirect exposure (e.g. hearing accounts from witnesses and family and friends about the death of a loved one) is likely to be different and more acute than for those working in other areas of policing (e.g. policing crowds or working on burglary investigations). It is important to state here that it is not only the case that

exposure to primary traumatic events can produce severe mental distress and a deterioration in officers' wellbeing, but that exposure to secondary traumatic events can also result in traumatic symptoms, posing a real danger for homicide investigators (Figley, 1995; Newell & MacNeil, 2010: Roach, Cartwright and Sharratt, 2017).

To reiterate, to our knowledge research is yet to capture the prevalence of problematic symptoms associated with severe psychopathologies, such as depression and PTSD, specifically with homicide investigators. Previous research has however identified high levels of PTSD with uniformed (more routine policing roles) with a previous UK study suggesting that 15% of males and 18% of female uniformed officers reporting as having had experienced PTSD (Hartley et al., 2013).

Regarding the development of less severe psychopathologies, the homicide investigator is arguably most susceptible to operational 'stress' (Roach, Cartwright & Sharratt, 2017). Lazarus and Folkman define stress as 'a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being' (1984, p.19). Several studies have shown that a higher prevalence of stress related problems are found among police officers than in the general public, sometimes manifesting as heart disease, cancer, alcohol dependency, drug abuse and divorce (e.g. Anshel, 2000; Kohan and O'Connor, 2002; Violanti, 2005). Police personnel work in a multitude of different circumstances, environments and contexts, which differ in the levels of stress that they can generate and can increase the risk of 'burnout' (Hawkins, 2001; Kurtz,

2008; Taris, Kompier, Geurts, Houtman, and van der Heuvel, 2010; Padyab, Backteman-Erlanson, and Brulin, 2016).

Although research to date has explored how some police duties often produce 'work-related stress', such as attending road traffic accidents and exposure to critical incidents involving a death (e.g. see He, Zhao, and Archbold, 2002; Liberman, Best, Metzler, Fagan, Weiss, and Marmar, 2002) little has focused on the different types and levels of work-related stress experienced by criminal investigators and more specific those investigating homicide. Salo and Allwood suggest that although officers on patrol have stressful events imposed on them from the outside and in real time (e.g. breaking up a fight at a bar) stress experienced by criminal investigators 'may still be very real', for example, when meeting the families of murder victims (2011, p98). Fyhn, Konglevoll Fell, and Helge Johnson, echo this distinction in their identification of subjective threats, as criminal investigators have to deal directly with the victims of serious and violent crimes, their next of kin, graphic depictions of dead bodies, and the ensuing media attention (2016, p.261).

Four different categories of 'police stressors' have been suggested 1) those extrinsic to the organisation, 2) occupational (i.e. task/job related), 3) personal, and 4) organisational (e.g. Hart, Wearing and Headey, 1993; Finn and Tomz, 1996; Abdollahi, 2002; Oliver and Meir, 2004). Again, however, such research has tended to focus solely on frontline (uniformed) police, such as the effects of dealing with calls for service and patrolling, or on organisational factors such as staffing levels (Fyhn, et al., 2016) and not on the effects of criminal investigations on those doing the investigating (Roach, Cartwright and Sharratt, 2017).

Identifying differences in types and levels of stress experienced by police investigators of different types of crime has received even less attention. Fyhn et al. (2016) studied how different investigators deal with different types of victim trauma in a study of Norwegian police investigators who were assigned to one of two groups: those that investigated 'assault crime' and those who investigated 'fire, forensics, financial, and environmental' crime. Of primary interest was hardiness', a personality style found to influence an individual's ability to cope with stressors in constructive ways, comprising three factors; challenge, control and commitment (Kobasa et al. 1982). 'Commitment' was found to be significantly higher in those who investigated assault crimes than the fire, forensics, financial, and environmental crime investigators (Fyhn et al., 2016). Additionally, the assault crime investigators reported significantly higher levels of social support available to them, higher levels of meaningfulness (in regard to how they perceived the work they do), and higher levels of subjective health problems, than those from the other group (Fyhn et al., 2016). 'Social support' (e.g. work colleagues and family) in the work environment and 'hardiness-commitment', were found to be particularly important when explaining the resilience to stress reported by the 'assault crime' investigator group.

Dealing with the unthinkable again. Investigating suspicious child death

Police investigators are not robots. The investigation of homicide is likely to produce emotional stressors which can adversely affect their decision-making. Much of the research to date has tended to focus on different types of cognitive bias that can impede, or even de-rail a criminal investigation (e.g.; Stelfox and Pease, 2005; Ask and Granhag, 2007; Rossmo, 2009) for example the timing and mode of critical decision-making in criminal investigation have been

researched, including investigator 'intuition' (Wright, 2013), and in the identification of common 'tipping points' in a decision to charge a suspect in homicide investigations (Fahsing and Ask, 2013).

Procedural guidance for UK police investigators has been available for more than a decade, exemplified by the *Murder Investigation Manual (2006)*, and *Practice Advice for Core Investigative Doctrine* (2005). Such guidance does not exist in Danish Policing. None of the UK guides, however, provide any kind of 'guidance' on how investigators are to identify and deal with the stressors likely to be generated by the investigation of homicide, so in this respect, UK and Danish homicide investigators share a level playing field. This may seem somewhat surprising if one considers that the growing research in this area continues to identify emotional stress as the most common influence on erroneous decision- making and subsequently in investigative failure (e.g. Rossmo, 2009; Stelfox and Pease, 2005).

Extant research on how police might deal or cope with the emotional and cognitive stressors they experience as a result of doing their jobs is not particularly helpful and relates principally to more mainstream police duties. As, for example, Waters and Ussery (2007) suggest: 'obviously, the inherent nature of police work precludes the immediate discharge of emotions. It is certainly not appropriate behaviour for a police officer who has been given the responsibility of maintaining stability in others to ventilate in public (p172). A case of 'keep it all in' we fear.

Some police officers do of course deal and indeed cope with the stresses and strains of their roles in 'positive ways', despite their more common fictional depiction as hard-drinking,

emotional wrecks in many a compelling police film and drama series. Interestingly, there is suggestion of a curve-linear relationship between the amount of police work experience and the level of stress reported, with those with minimal and extensive job experience reported as being less likely to consider their job or role as stressful (e.g. Violanti, 1983; Patterson, 1992). A possible explanation for this is that the former may not yet have been in post long enough to be significantly detrimentally affected and the latter have somehow 'hardened' and learned to live or cope with it.

Waters, Irons and Finkle (1982) suggest that stress can be categorised according to; the source of responsibility, the individual officer, and the Department (1982). Of most interest to the present paper are the individual coping strategies they identify:

- the development of a dependable support system (e.g. family, friends and colleagues)
- improved communication skills (e.g. the ability to discuss their views, opinions and feelings with others)
- a means of ventilating feelings appropriately (e.g. playing sport or having interests outside of work)
- a regular exercise program with minimal time expenditure of 30 minutes a session
 (1982, p25)

Waters, Iron and Finkle (1982, p.25)

In a recent article, Roach, Cartwright and Sharratt (2017) found quantitative differences in the cognitive and emotional effects experienced by police investigators according to whether the victim was a child(ren) or an adult(s), with homicide investigators reporting that they had experienced different (and more acute) emotional effects when the victim was a child. In this

study 99 detectives from across the UK that had experience of investigating both adult and child homicides completed an online survey. Acute emotional stress experienced was reported to be more likely when investigating a child homicide compared with an adult, and did not appear to lessen (or indeed get easier to deal with) the more exposed to child death they became. If the wellbeing of investigators is to be preserved, it is imperative that a more rigorous understanding of how investigators function, make decisions and cope with the emotional and cognitive effects generated by investigations into child homicides, is achieved.

The present paper

The present paper provides a qualitative exploration of different cognitive and emotional stressors experienced by police homicide investigators, depending on whether the victim is an adult or a child. Eleven semi-structured interviews with experienced police investigators from the UK and Denmark were conducted using a thematic framework developed by Roach, Cartwright and Sharatt (2017) which focused on five key cognitive and emotional stressors identified by in relation to suspicious child death investigations: *investigative challenges*; pressure to conclude investigations quickly; emotional and cognitive stressors; dealing and coping; and training and support for investigators.

Method

Participants

Participants for the present study were recruited from two police services located in two European capital cities in Denmark and Wales. The inclusion criteria for participants for the present study was that the investigator must have experience of working on both adult and

child homicide investigations. Both with the present paper and in a previous sister paper (Roach, Cartwright, Sharatt, 2017) participants were asked the age at which they thought a homicide became an adult homicide and was found unanimously that a child was considered a victim of homicide aged below 18 years of age. This was used to define child victims with all participants and will be used to delineate child form adult homicide victims and investigations hereafter.

Detailed in table one are the demographic characteristics for the cohort of investigator participants included in the present study.

Table 1.0: Participant demographics

Participant	Gender	Age	Has own children?	Years in Police Force	Investigation experience	Approx. number of adult homicides	r Approx. number child deaths	Years since last child case	Number of cold cases	
									Adult	Child
D1	Male	55	Yes	30	21	15-16	4	Unknown	Unknown	0
D2	Male	59	Yes	31	21	6-7	1	6	Unknown	Unknown
D3	Male	62	Yes	40	37	50	10	1	5	0
D4	Male	56	Yes	35	26	50	1	21	4-5	0
D5	Male	30	Expecting	8	2	1	1	Currently investigating	0	0
D6	Male	58	Yes	35	29	50	2	Currently investigating	4	0
UK1	Male	62	Yes	36	33	At least 120	10-12	10 for last new case but now on cold cases	Unknown	Unknown
UK2	Female	37	No	15	13	45-50	5	Currently investigating	Unknown	Unknown
UK3	Male	47	Yes	21	18	30-40	2	Currently investigating	1	0
UK4	Female	47	Yes	26	5	15-20	2-3	Currently investigating	0	0
UK5	Female	42	Yes	17	9	6-8	1	Almost 2	0	0

In the UK police cohort, five out of six homicide investigators who met the criteria of having experience of both child and adult homicide investigations, were interviewed and six out of six from the Danish police service. In defence of what might be perceived to be a rather small sample size, the low number of child homicides in each country meant that investigators with experience of both child and adult homicide investigations are mercifully rare, even though we chose police investigators from two European capital cities. As shall be discussed later, a probable next step is to interview investigators from countries with higher child homicide rates than the UK and Denmark, but in relation to the present paper, eleven investigators from two different European cities was considered suitable for an exploratory study of this nature.

The two police services were selected as they have similar population numbers they police, but not however for rates of homicide. The reason for selecting Danish investigators and not those from other European countries, although admittedly partly influenced by opportunity, was due to the fact that child homicide is somewhat rarer in Denmark than in the UK, thereby affording some comparison of the effects on investigator wellbeing of both common and uncommon exposure to the cognitive and emotional effects of child homicide investigations.

As can be seen in table one, all the Danish investigators were male, whereas two of the five from the UK were male. The median age of the investigators was 55 (M= 50.45, SD=10.68) and the average amount of time spent in police service 27.45 years (SD=11.18). Five out of six Danish officers were men in their late 50s-early 60s and had children of their own (five were grandfathers) with the one, considerably younger, remaining Danish investigator expecting his

first child within three months of the interview. Only one of the five UK officers did not have children, and of the four that did, all but one had children of school-age or younger.

The average amount of time serves as a police officer for all participants (not limited to homicide investigation) was 19.45 years (*SD*=11.38) indicating that all were experienced police officers, if not experienced homicide investigators. The number of adult homicide investigations that the 11 participants had been involved with varied substantially from 2 to over 120 homicide investigations, with the mean number of adult homicide investigations found to be 36.20 (*SD*=34.02). Unsurprisingly, the mean number of adult homicide investigations for the Danish investigators was found to be 28.67 (*SD*=23.82) whereas for the UK investigators it was 45.30 (*SD*=44.63) reflecting the difference in the homicide rates in the UK and Denmark.

With regard to experience of investigating child homicide, the number varied from 1 to 12 investigations, with the mean number investigated being 3.60 (*SD*=3.62) and the mean number of child homicide investigations for Danish officers predictably lower (*M*=3.00, *SD*=3.55) than for their UK counterparts (*M*=4.3, *SD*=4.02). The participants differed with regard to the length of time since they had last been involved in a child homicide investigation, with 2 out of the 6 Danish investigators and 3 out of the 5 UK officers, currently involved with homicide investigations where the victim(s) was a child. Of those not currently involved in a child homicide investigation, the average amount of time since they had was found to vary from 1-21 years. The number of adult homicide investigations reported as remaining undetected (i.e. cold cases) was found to be different for individual investigators, varying for Danish investigators from 0-5 cases, whereas for UK investigators five out of six officers had at least

one undetected case remaining. No investigator from either country reported being involved with an undetected (i.e. unsolved) child homicide.

Procedure

A semi- structured interview approach was used, with the interview schedule informed as previously stated by the findings of Roach, Cartwright and Sharratt (2017) study. The first section of the interview collected investigator demographics with a following set of questions focused on individual investigator experiences of adult and child homicide, for example; their perceptions of what defines child homicide, their different investigative experiences, accounts of their most recent adult and child homicide investigations and finally whether they thought that having children (i.e. being a parent) had ever affected how they approached and thought about child homicide investigations? The third part of the interview focused on the cognitive and emotional effects police investigators felt that they had experienced when investigating suspicious child deaths and how they had dealt or deal with them both in and outside of work. Official permissions were obtained from both police forces before any individuals were approached. All potential participants were provided with an information sheet explaining the purpose of the study and what their participation would entail. All willing participants were asked to sign a consent form prior to taking part in the interviews. All interviews were conducted in person and were digitally (audio) recorded and later transcribed verbatim. During the interviews conducted in Denmark a police translator was available in order to assist all the participants with their answers, as English was obviously not their first language and to ensure that there were no misunderstandings.

Method of analysis

Qualitative description (Sandelowski, 2000) was chosen as the most appropriate method of analysis for the data in the present study, as it is a low in inference approach that does not seek to probe for underlying meanings within data. As Sandelowski describes qualitative description is a methodology that is primarily concerned with presenting findings in 'everyday language' (Sandelowski, 2000 pp 336). A directed qualitative content analysis procedure was adopted whereby codes were generated on an interview-by-interview basis, and then recorded by hand as opposed to using a qualitative analysis programme. As this article was a follow-up to a previous explorative paper, it was decided that the analysis should be directed by the themes found previously, to aid with the identification of key concepts and variables that were used as initial coding categories (Potter & Levine-Donnerstein, 1999). Upon analysis of the codes generated previously, five main categories/themes emerged that related to: challenges associated with suspicious child death investigations; the pressure to conclude a child homicide investigation; the existence of emotional consequences of investigating child homicides; the methods of coping with such emotional consequences; and the current and future training and support needs of police homicide investigators. These five areas form the structure of the following findings and discussion section.

Findings and discussion

The challenges associated with investigating suspicious child death

To begin, all investigators were invited to consider whether the challenges associated with investigations into suspicious child deaths/homicides differed from the challenges encountered during the investigation of adult homicides. For the Danish investigators, there

was a consensus that investigations into suspicious child deaths/homicides were not necessarily always more complex than adult homicides. The complexity of an investigation was considered to vary from case to case according to factors including; the ease with which the cause of death can be established, the availability of witnesses, and the potential number of suspects. Although UK investigators agreed that each case presented its own unique set of challenges, they felt that cases involving the suspicious death of a young infant in particular, were likely to present more challenges.

Commonly, UK investigators felt that in the case of adult homicides, identifying injuries and therefore the cause of death, was usually straightforward (e.g. stab wounds or strangulation). However, where the victim was an infant, injuries were more likely to be internal and therefore making identification of the cause of death less clear. Whereas it might be obvious that an adult's death was not accidental, they highlighted that it was considerably more difficult to establish whether an infant's injuries were accidental or maliciously inflicted (e.g. as a result of shaking) and reported that in some cases they had waited up to a year to receive a coroner's report. Even then, they were faced with the additional challenge of finding a medical professional that was prepared to conclusively state that the cause of death was homicide as opposed to accidental.

Moreover, two UK investigators opined that the amount of resources allocated to an investigation into a suspicious child death was dependent on the ease with which cause of death could be established. If in a case this proved relatively straightforward, then they suggested that more officers would be allocated to the case so that it could be successfully

concluded quickly (usually in around two weeks). Conversely, where cause of death was less certain or ambiguous, then the chances were that the investigation would progress much slower and would last longer, due to waiting for medical evidence. These investigators were critical that fewer resources were devoted to these cases, even though similar tasks needed to be undertaken and it was likely that the investigation itself would be more complex:

"On a particular case, it took them at least nine months to a year to tell us whether the child had actually been killed or not, by which stage if you hadn't been investigating it at the initial stage, the witnesses, anything you would normally do...CCTV, phone work...would have disappeared." (UK3)

Investigators in both countries reported that in many respects the investigative process was very similar regardless of whether the victim was an adult or child, for example, relatives still need to be informed; statements still need to be gathered; and evidence still needs to be secured. However, interviewees in the UK continued to highlight significant differences where young infants were concerned. Firstly, the involvement of the Family Court:

Obviously you are dealing with the family courts as well, which in itself is very, very frustrating, because they work on different levels of, they deal with balance of probabilities, whereas we deal with the Crown Court use reasonable doubt. So balance of probabilities, they can say oh it was him, well that just blows our case you know. It's very frustrating when you are dealing with agencies that haven't got the balance, the proof that we need, to go to criminal court and they can just make a decision and that can affect our investigation. From that point, it's different with a child, because obviously then, you know, the family court is a huge player in this, as opposed to an adult court (UK 4).

UK investigators also highlighted that adult homicides were more likely to occur in a public setting and therefore in the presence of witnesses, where, by contrast, suspicious child deaths usually occurred in the privacy of the home, with only parents or caregivers present. Three investigators from the UK and one from Denmark described cases where neither parent was

willing to admit responsibility; in which case, it was incredibly difficult to prove which one had caused the child's death. It was also explained that in adult homicide investigations, friends, colleagues and associates are available to be interviewed to corroborate information, as well as interrogating social media accounts to learn about the victim's lifestyle and what is 'normal'. However, the younger the child, the less likely they are to have social networks and so it is common for the case to become "exclusively a medical investigation" (UK 3).

In cases where it was difficult to prove which parent was responsible, the investigators expressed a mixture of frustration and regret that they had been unable to secure a conviction on behalf of the child. Two of UK investigators directed their frustrations at the UK Crown Prosecution Service on occasion for their refusal to prosecute the case in the absence of more convincing evidence. In relation to this, one investigator reported that he had continued to investigate the case until more evidence became available, and another expressed concerns for the welfare of some of their colleagues who had been unable to "let the case qo" (UK 4).

"Clearly one of them has shaken this child and the child has died, but we can't prove which....it's terrible knowing that there will be no justice for that little child." (UK 2)

"Knowing that you cannot take it to court and cannot get a conviction is something that you will have to live with." (UK 4)

Four investigators from Denmark and two from the UK reported that one of the most difficult aspects of an investigation were conversations with the child's parents and family, although there was some suggestion that "with experience, it does make it a bit easier to talk with these

people" (Den 2). For some, these difficulties stemmed from a heightened sense of injustice that is associated with the death of a child:

"When a child dies it is a horrible act, it is something that should not happen. It makes a huge difference on how you handle the case. Particularly in child homicide cases, it is very crucial that during the investigation, and dealing with the family, that you tread very carefully and have a lot of empathy for the families..." (Den 1)

Investigators commonly emphasised the importance of handling the case sensitively whilst demonstrating sympathy and compassion for the grieving family, but they were also very mindful that the parents and family members were common suspects in a case. This meant that it is common for detectives to experience mixed feelings towards the parents or family - "I felt sorry for her as she had lost her child but also knew that she wasn't squeaky clean" (UK 5).

There was a consensus that a fine line existed between showing an appropriate degree of empathy and becoming too emotionally involved, which has the potential to cloud an investigator's judgement. However, one investigator reported that where a vulnerable person is concerned, such as a child, it can be more difficult to maintain a professional distance and remain objective (UK 4).

"I could sense that there was something odd about the mother...the nurses thought that she was so sweet...but both me and my colleague had the sense that something wasn't right. It's very important in these cases that you can see what other people are feeling but without being emotionally involved, otherwise there is the risk that you will rule out suspects too early." (Den 5).

Although all investigator participants stated that they did not feel that cases involving the suspicious death of a child were necessarily more challenging than adult homicides, the heightened vulnerability of younger victims was reported to carry an additional emotional

burden for investigators. An exception to the 'not more complex investigations' rule found was when the investigation was into the suspicious death of a young infant, where both difficulty in establishing the cause of death and the common absence of witnesses and corroborating information, often result in lengthy and complex investigations. Additionally, the associated inability to achieve a prosecution was highlighted as a source of long-held anguish and regret by four out of five UK investigators.

Feeling pressured to conclude an investigation

Expanding on the pressure to get a conviction, investigators were also asked to consider whether the pressure to conclude a case varied depending on whether the victim was an adult or child. When asked this question, all six Danish investigators and two UK investigators immediately recounted the sense of personal pressure to achieve a satisfactory conclusion to a case (as opposed to pressure exerted by senior police officials or external sources such as the media). In Denmark, it appeared that the pressure experienced arose more from a personal, or perhaps collective, sense of responsibility to achieve justice on behalf of the child:

Den 2: "Pressure on child cases is higher."

Interviewer: "Where does it come from?"

Den 2: "Mostly from myself, I think that little children do not deserve that, not at all, not at all."

All UK investigators reported a sense of pressure to achieve a conviction (although this might reflect one particular high-profile case being in court at the time of the interviews).

Investigators reported that they were often anxious that they might have missed an important detail in the investigation or that the defence might be able to identify flaws in their evidence.

There was some suggestion that these anxieties might have occurred partly because of being unable to spend as much time on an investigation that they would have liked to due to 'workload issues' (e.g. "detectives are pulled from pillar to post", UK 2). For others, greater investigative experience appeared to provide a greater sense of reassurance that a case was likely to 'stand up in court' - "Instinct develops with experience to spot when something has been missed in an investigation" (UK 3).

"It's just all of a sudden, in the last couple of days, it's really weighed on my mind that if he walks away from this, I will be devastated because I don't know what more I could have done to put a compelling body of evidence before the jury." (UK 3)

Of the eight investigators who referred to a sense of personal pressure, three from Denmark and one from the UK reported a greater sense of pressure in relation to child victims. This could at least partly be attributed a greater sense of disbelief that anyone could harm a child and more difficulties even beginning to comprehend the motives of the perpetrator (e.g. "In cases with a child homicide, something is seriously wrong...there is no normal reason to kill children." (Den 3).

These investigators reported that they had felt more compelled to work even 'harder' when investigating a child homicide ("We do all we can every time we have a homicide, but when the child is a victim, you've got something more so we work even harder", Den 3). One reported that she would "willingly burn herself out" (UK 2) when investigating a child death and another admitted that detectives felt guilty when they left the office on time in case they missed an important development in the investigation ("We actually felt bad going home because you know something else might happen in the investigation", Den 5).

When the other four investigators spoke about personal pressure said they feel an extremely high level of pressure with all homicide investigations, irrespective of the age of the victim.

Whilst some highlighted that the investigations could be just as time-consuming, others believed all victims were equally deserving of the most thorough investigation possible:

"Homicide is the worst criminal case we can have. One man kills another and that's the worst thing that a man can do. For me, a homicide is a homicide, and it doesn't really matter whether it's a grown up, a child, or a hobo." (Den 1)

All three remaining UK investigators in response to the 'pressure question' named the media as opposed to a sense of personal pressure. Whilst some child deaths largely escaped media interest because they had happened "behind closed doors" (UK 3), for others, the media pressure was said to be 'magnified' when the victim was a child (UK 3). This could be an "added burden" on investigations as the media would often obtain information from social media and present it as though it were evidence from official sources (UK 3). One interviewee was adamant that he would not succumb to media pressure to solve the case as quickly as possible as "the most important thing was to handle the case ethically, conduct the investigation thoroughly and ensure that the evidence would be good enough to secure a conviction" (UK 1).

Four investigators from Denmark and three from the UK reported that they felt that more experience helped them to deal with any cognitive and emotional pressure felt during a child homicide investigation, as experience facilitated better decision-making and led ultimately to a more efficient investigation ("with age and experience, you are more able to remain calm, and that's very important in making the right decisions", Den 4). Contrastingly, Roach, Cartwright

and Sharratt. (2017) found that that experience was not a significant factor in this type of investigation.

As can be seen here, investigators reported multiple sources of pressure, including a personal sense responsibility to achieve justice on behalf of the victim and duty of obligation imposed by the media. For some, but not all investigators, the perceived sense of pressure was heightened in cases involving a child. Implications of this were that investigators would expend considerable energy into investigations, therefore experiencing physical and emotional fatigue.

The emotional consequences of investigating suspicious child deaths.

In addition to questions surrounding investigative or procedural challenges, all investigators were invited to reflect on any emotional impact experienced as a consequence of their involvement in suspicious child death/homicide investigations. All eleven investigators agreed that investigations into suspicious child deaths were highly emotionally charged events ("the body is so small and vulnerable, like you can look at that little life, you're robbed of all your future by some callous act", UK 1). However, when asked whether they were affected by their involvement in such investigations, eight of the interviewees demonstrated a great deal of emotional resilience (e.g. "Even though we are talking about this topic it does not influence me much", Den 1). One interviewee suggested that he had even become "hardened" to such investigations, so that now he was no longer 'upset by them' (UK 4). He did, however emphasise that this is only something that had developed with time and experience (UK 4).

non-fatal violence towards children and child sexual abuse since the child would have to live with the consequences of their victimisation:

"Homicide is no problem for me, whether it's a child or young man, or old woman, it's no different". In cases about sexual abuse, or violence towards children, it's worse because they are hurt but they are still living, they are alive". (Den 3)

One investigator became visibly upset when recalling details of investigations that he had been involved with and expressed a sense of surprise that he had felt emotional recollecting this case ("It's surprising that I was emotionally involved when I re-told the story about the eighteen year old" (Den 5). This suggests that it is not typical for him to feel this way, investigators are rarely invited to talk about how investigations make them feel, and are rarely given the space to engage with their feelings about cases and how they might affect them.

Despite the emotional resilience claimed by most of the investigators, when prompted to consider memorable cases, it was still clear from the way that they spoke and from their facial expressions, that some cases awakened deeper emotional reactions than others.

Investigations into child homicides characterised by extreme levels of violence (e.g. "It was the great violence...it was quite a scene", Den 2) were cited as the most difficult to deal with emotionally. For these cases attending the crime scene or autopsy, or viewing photographs of the body, were variously described as being very 'sombre', 'shocking' and 'unbelievable' moments in a case. For some, visiting the crime scene provided a disturbing reality of the events that had occurred and one investigator reported that she still had vivid recollections of the sights, smells and sounds from the scene (UK 2). Another interviewee, although preferring

not to recount his experiences in detail, described experiencing 'flashbacks' to the crime scene for some time afterwards (UK 1).

It also emerged that the emotional impact of an investigation could be intensified if the case was prolonged, as is common in suspicious infant deaths. One investigator described an investigation into the death of two children which lasted almost two years, where several investigators had devoted all their time to the case. He described how their lives had been utterly consumed by the investigation and how the depth of their involvement had intensified the emotional consequences experienced

"You breathe it, you live it for every day of your life, every morning you're back into it". (UK 1)

"I read their school books, looked at their drawings and saw their school reports. Even though the children were dead, I got to know them very well...I spent a lot of time with the family and even went to the funeral.....and I think that all of these things, the collectiveness of that, is very impactful to an individual." UK 1).

Although it might seem appealing to anticipate which cases will have the greatest emotional impact, one interviewee warned against this as in their experience it can be difficult to foresee whether and which detectives will be affected by a case:

"Certain things affect you and certain things don't. Things that you wouldn't expect to affect you do, and things that you would expect you affect you don't. 'It's the ones that you least expect and that take the carpet away from your feet, that affect you the most." (UK 4).

Another investigator suggested that a greater sense of identification with a case might provoke a stronger emotional reaction (UK 2). To explore this, investigators were asked whether they

were parents and whether they thought that having children had any bearing on how they reacted to investigations. In Denmark, five of the investigators had grown up children, but they gave no indication that this made the investigations any easier or more difficult. They also denied that similarities between the age of the victim and the age of their own child at the time of the investigation had any bearing on how they reacted to the case. The remaining investigator was much younger and was expecting his first child within a matter of months, but said that now this did not have any bearing on how he felt about the cases but acknowledged that when the baby was born it might become more "real" and was likely to affect him more in the future.

Four UK investigators had children, and in stark contrast to the Danes, all of them reported that having children had affected how they responded to child homicide investigations. Again, the fact that the Danish investigators were all men and aged 10-15 years older on average than their UK counterparts is likely to have influence here. Especially as most of the UK investigators had children of school-age, where all but one of the Danes had grandchildren. All the investigators, however, were adamant that although this had not affected the investigative process itself, they thought that the emotional impacts of investigating suspicious child deaths were higher for detectives who had children. The emotional effects of the case were considered likely to be more acute when the age of the victim coincided with the age of the detectives' own children, since they were more likely to draw parallels between their lifestyles, interests and achievements. UK 4 explained that being a mother exemplified the vulnerability of children and made it more difficult to comprehend the actions of the perpetrator.

"I think you realise how dependent a child is, you realise how vulnerable a child is....its at that point, when you see what somebody else can do to a child...you just can't believe that somebody can be so, well, I can't really think of the words to describe it...I just can't even comprehend someone being that way inclined". (UK 4)

Despite some initial outward expressions of resilience, further exploration revealed that some cases were deeply ingrained in all of the investigators' memories and were associated with hurtful emotions. Cases that were most detrimental to investigators wellbeing tended to be lengthy in duration, and involve severe levels of violence or a sense of personal relevance.

Coping with the emotional consequences of investigations

Investigators were also asked how they dealt with their feelings both during investigations and after the investigation had ended.

During the investigation

Whilst the investigation was in progress, all reported that they will be so deeply immersed in their duties that there was little opportunity to engage with their feelings about the case (e.g. "we're not thinking about the dead people, we're thinking about who has done this to dead people and I think that's a very good thing". Four of the Danish investigators and two from the UK commented that it was important to maintain a degree of professional distance in homicide investigations. At least one interviewee suggested that this was a strategy that he had developed over time, and it would be reasonable to suspect that detectives with less experience might not yet be equipped with this defence mechanism:

"When you've been told that you're going to deal with a child death, you put your police officer head on. Sometimes looking at the pictures can be horrific, because you can see their small limbs or you can see how small the child is and that is horrendous...but when it goes back down to the black and white and the facts of the case, then you just get back into it again". (UK 4)

"I have learnt it the hard way over many years and I don't think it's some problem for me to work these cases now. I'm not thinking about it here, I'm thinking a lot about what I'm doing. If you don't do that, you're crazy." (Den 3)

Three investigators from Denmark and two from the UK stated that striving constantly for a high degree of thoroughness in their investigations helped them to cope with the emotions generated by investigating suspicious child deaths. This was often associated with knowing that they had conducted the investigation to the best of their ability, and this helped them to stay calm and provided a sense that they had done everything they possibly could to achieve justice on behalf of the victim:

"What really helps me is my thoroughness....there needs to be a very strict order to how everything is done. Of course this is difficult, but I like the difficulty because I know that everything is being done exactly as it should be, and that makes me more relaxed ". (Den 1)

The level of dedication to the investigation meant that all were prepared to work very long hours, but this evidently took its toll on their personal wellbeing. For example, one commented that by the time they arrived home "my head was shot" (UK 3) or "I had no capacity to listen [to what my wife was saying]....and I just needed to zone out for an hour" (UK 3). The intensity of investigations also interfered with family lives for all of investigators, three of whom reported that they had missed family celebrations or special occasions. Despite this, there was no sense of resentment and an acceptance that "it goes with the territory" (UK 1) or "it's our life" (Den 3).

"It will take more of your life than you probably intended, albeit I'm not bitter about it at all, because it's given me huge highs, some of the positive outcomes have been well worth the trade-offs." (UK 5).

All the investigators appeared very conscious of the need to restrict the effects of homicide investigations from interfering with their personal lives and some described doing this by compartmentalising their work and home lives (UK 4). However, there was some acknowledgement that it takes a particular type of person to be able to detach themselves from such emotionally charged investigations - "You have to be a little bit special, you can't think about all of the dead people when you get home, you have to close it when you leave the police station" (Den 3).

All were asked whether they thought that their families were aware when they were involved in homicide investigations and all said 'yes', because they would usually spend more time away from home and cases would appear in the media. With the exception of one UK investigator that had a partner in the same police force, the remainder said that they preferred not to discuss the nature of their work with their family. This served to maintain a degree of separation between work and home- life, but also ensured that family and friends were protected from the upsetting details of homicide investigations. For the same reasons, investigators reported that they were unlikely to confide in their family when they were dealing with the emotional effects of their involvement in a difficult homicide investigation.

Investigators, particularly those in the UK, described their personal lives as being very busy. All spoke of several personal commitments, such as caring for elderly relatives, as well as

engaging in many outside pursuits ranging from gardening, to keeping horses and playing in

sports teams. Investigators from both countries looked to be in good physical health with all stating that they took part in fitness activities regularly. Although some did not see sporting activities a serving directly as a coping mechanism (e.g. "I wouldn't feel like I'd have to go and run and swim because of that", UK 5) others recognised this to be an important source of "relaxation" (UK 1). For one, it was important that she visited the gym after work as this enabled her to focus on family life when she returned home:

"I deal with stress by going to the gym. Headphones on, Sky News and aerobics and I'm just gone. I have to do that before I go home, because I can't go home dealing with all this, it's just still full on in my mind. If I just went straight home, I'd just walk in through the door and it's dogs, kids, and it's like hang on a minute." (UK 3).

After an Investigation

Once the investigation had been closed, ten out of eleven investigators reported that they rarely reflected on cases. For the UK contingent they stated that they simply did not have time or even the chance to reflect on a case, but that this was not necessarily a bad thing - "In our job you move from one serious case to another, you soon get engulfed in something else and being busy takes your mind off things" (UK 4). Interviewees in the UK also described incredibly hectic home lives that allowed little time to contemplate or to dwell on "police business".

In Denmark, we perceived a greater sense of a personal decision not to reflect on a case. This is not to suggest that the investigators made a conscious attempt to wipe details of the case from their memory or to avoid all reflections on a case, instead they appeared to consciously park it by "putting it on a shelf in your mind and your memory" (Den 1) the case was still available for reflection should the occasion to do so arise, but prevented thoughts about the

case becoming intrusive (e.g. "...the experience I keep with me, but it doesn't affect me psychologically", Den 3). Occasions to reflect on the case seemed to be limited to discussing the case with colleagues around the time that a case comes to trial, and perhaps considering learning points from the investigation should a similar case arise. For five investigators, these reflections tended to be rather brief and certainly felt to be "no big deal" (Den 3). There was however, one exception to this stated that although he was largely unaffected by the case during the investigation, once the case has been closed he reported a greater likelihood of reflecting on the case and there was some indication that this affected him emotionally

"Sometimes I can be emotionally affected, perhaps when telling someone about the case, and I think why does that affect me? But it does sometimes. But you don't feel like that when you're actually in the investigation, only when it's finished and you're looking back on it" (Den 6).

Overall, investigators seemed to protect themselves from potential adverse emotional consequences by avoiding reflecting on cases. In the UK this appeared to be less of a deliberate decision but more an inevitable consequence of busy work and home lives leaving limited opportunity for contemplation. By contrast, in Denmark, investigators appeared to make a more conscious choice to avoid reflections on past investigations, thus seemingly acknowledging the harmful effect of these recollections should they be allowed to intrude into their thoughts. The reader is reminded that all of the Danish Investigators were male.

Training and Support

Last, all investigators were asked about the availability of training and psychological support for investigators involved in suspicious child death/homicide cases. All the investigators

emphasised that detectives involved in investigations into suspicious child deaths need a particularly wide set of skills including necessary investigative skills, the ability to communicate with a variety of external agencies, and the capacity to communicate with families that are bereaved and/or suspected of causing the death of their child. One interviewee commented that the more cases you are involved in, the more skilful you become and the easier the investigative duties become, but in contrast the emotional side does not appear to become easier as 'it's still somebody's life that has been lost' (UK 4).

In Denmark, there is currently no guidance or training related specifically to the investigation of homicide or suspicious child deaths. When asked, UK, investigators highlighted the more generic *Murder Investigation Manual* and some had attended a course on investigating suspicious child death. All but one had been in their role for a considerable length of time before either of these had become available to them. In both countries, all reported that they had mostly learnt through their experience of working on cases (e.g. "I mostly I have learnt by doing it", Den 6). One investigator spoke of the value of learning from more experienced colleagues, and stated that each of them had their own strengths from which he could learn different skills (Den 5). However, concerns were expressed that nowadays there was not enough detectives or expertise within the department to support new recruits to learn on the job.

"We're not good enough to tell others what we do. As you see, we have no people in this department and my last homicide was in December and after two weeks, I was alone on the case. That's not good enough, I need a colleague to talk with all the time, to get, so and we don't have, haven't enough people to tell what we know and what, we don't have." (Den, 2)

Although one investigator said that "we could probably prepare ourselves to deal with these cases better if we had more training in that specific area" (Den 1), the five remaining Danish investigators reported that it was not feasible to teach a detective how to conduct investigations - it was essential to learn on the job. Three of the Danish investigators reported that because each case presented its own unique challenges, it was difficult to provide a training course or guidance document that would be useful in every possible situation.

Similarly in the UK, it was felt important to develop transferable skills that would be applicable to a range of cases rather than developing a specific set of procedures to be followed.

"The trouble with lots of guidance is that it's somebody else's guidance, it's not the panacea, its guidance and sometimes you have to be flexible around the guidance, do what works, because if something doesn't work in the real world then we can't hit everything with this gold model." (UK 3)

Being and working as part of a team appeared important in terms of developing expertise but also provided an important informal support system. Interviewees in both countries were very appreciative of the support that they received from their peers, and said that this was made possible by a sense of camaraderie, loyalty and shared experiences ("We're all in the club", UK 1). One investigator said that this fostered trust and that detectives would be less likely to speak to someone who had not experienced similar emotional experiences, presumably generated by homicide investigation (UK 4).

In both Denmark and the UK it was felt that over the last 10-12 years, there had been a cultural shift in the police as there was more "acceptance that emotional problems are a natural reaction and not a sign of weakness" (UK 4). In Denmark, investigators were aware of opportunities to schedule formal debriefs once a case had been closed. It was said that formal

debriefs were more likely to be arranged automatically by seniors if there were a lot of people from different departments and agencies involved with a case. That is not to say that debriefs would not happen if the case was confined to a small team of investigators, but it was thought that it required someone to specifically request the debrief before it happened ("If anyone wants a debrief, there will be a debrief, but someone has to ask for it", Den 1). What was not clear to us was whether the interviewees felt that they would ever be likely to ask for a debrief session and if so under what circumstances?

All eleven investigators stated that they felt that one-to-one psychological support could be easily accessed in their force and that that this was now actively encouraged by their line managers. However, as highlighted by interviewees "it still requires that someone comes forward and says 'I need this help'." (Den 1). One interviewee reported that detectives do not necessarily recognise that they need help and might not be willing to admit that they are struggling to cope. Indeed, sometimes it might require a more experienced colleague to draw their attention to problems that they are experiencing.

"Identifying when you need to take time out or seek support comes with age, and you're less afraid to say I can't cope....As you get older you are more prepared to talk about things, whereas when you are younger it can be seen as a sign of weakness....I'm also better able to identify people who are struggling as I've been through it." (UK 4)

With concerns about the erosion of team-based working taken aside, all of the investigators saw being a member of a close team as an invaluable opportunity to learn from one another and a source of vital informal support. Given that there are indications that investigators might fail to recognise the adverse emotional consequences on involvement in difficult

investigations, it is important that their colleagues who know them well are able to recognise the signs and encourage them to seek support.

Conclusion

As briefly explained earlier, one limitation of the present study could be the sample size. Indeed, the reader may be permitted to consider it to be a little on the small size. In our defence, although eleven participants took part in the study, it is posited that that this sample size is justified based on the knowledge that the investigators involved were the only detectives minus one in two European capital cities who had experience of investigating both adult and child homicides. That said, future research (indeed ours) is encouraged to examine the breadth of emotional and cognitive effects on the wellbeing of a larger number of homicide investigators from other areas of the World with different homicide rates. For the purposes of an exploratory study such as this with no concrete aim of generalizing the findings across all homicide investigators in all countries, we suggest that the findings should only be taken to be representative of two different investigative teams in two different, albeit culturally similar, countries. Although this study builds on the effects of homicide (particularly that of a child) and how investigators might deal with its effects on their wellbeing found in Roach, Cartwright and Sharratt's (2017) earlier study, it must be seen as a continuation of the beginning of a research focus in this area and not the end. We wholeheartedly plea for more research to be conducted in this area to ensure that those who do such a difficult and potentially dangerous job in terms of their wellbeing, get the help they deserve.

Another corner-stone to our defence is that that the content of the semi structured interviews in this paper were derived from the findings from questionnaires completed by a much larger

sample (N=99) of detectives, although admittedly only from the UK (Roach, Cartwright & Sharratt, 2017). The main purpose of the present study was to explore in more detail what the cognitive and emotional effects are, how they manifest themselves, and how investigators deal/cope with them.

As previously explained, the present paper uses under 18 years of age to differentiate child from adult homicide, but does not differentiate between different ages of child victims apart from young relating to babies and toddlers and older children relating to those in their teens. Although the findings presented strongly suggest that the age of the child victim plays a key role in the emotional effects generated and experienced by investigators, the present study does not explore specifically individual ages of child victims and how these effects might vary on investigators. Further research is encouraged which does this so that notable differences in the effects on investigators according to the age of the victim (e.g. our findings show that the effects felt are different for many investigators when the child is an infant) can be identified so that appropriate support and guidance can be provided.

The present article provides an important insight into the differential effects of child homicide experienced by UK and Danish police investigators. It suggests that child homicide investigations carry important personal implications for those doing the investigating. Previous research by Roach, Cartwright and Sharratt (2017) evidenced that there are indeed differences between adult and child homicide investigations and the findings of the present study provide a more rigorous explanation of such differences, for example the level of violence used and

whether investigators have children the same age as the victim. It may seem simple, but it is the vulnerability of children and their sheer helplessness that this cohort of investigators identified as exacerbating the effects of such investigations; more so than for adult homicides.

Investigations of homicides involving very young children are often conducted over a long period of time, due to the common difficulty with establishing cause of death. Consequently, our cohort of investigators reported 'immersing themselves' in an investigation for longer and were therefore more exposed to the effects that such investigations generated. Some stated that they had experienced flashbacks. We cannot offer any clinical evidence here, but it is highly likely that investigators are more susceptible to experiencing Post Traumatic Stress Disorder (PTSD) in child homicide investigations. Further research is encouraged to develop ways of better predicting, diagnosing and treating PTSD in homicide investigators, for although investigators potentially develop higher levels of 'hardiness-commitment' Fyhn et al., (2016) this is something that must be examined in greater detail and not simply presumed. An important direction for future research would be to develop a tool to identify when an investigator should be given time away from such psychologically intrusive investigations. Child homicide investigators need to be made more aware of the effects they are likely to experience, how to notice them, and how they might deal with them. The importance of social support was clear and further research is warranted to inform a support programme for officers including the integration of various coping mechanisms such as exercise and

relaxation. Senior managers are also advised not to allocate child homicides to the same investigators, while the cumulative effects of such investigations remain unknown¹.

One unanticipated finding raised by Danish investigators was that those on the periphery of a homicide investigation (e.g. scene of crime officers and paediatricians) could possibly be more affected than those at the heart of an investigation as they had more time to reflect on a case and did not know the specific details of a case with a lack of knowledge being perhaps more distressing

"The uniform people, who are involved in the case by standing outside the door, have a lot of time to think and they have big problems. They haven't seen the dead people, but they have heard about it and they are standing just outside the door...some of these policemen are very hurt by the things they have heard" (Den 3).

The cognitive effects and emotional stressors of child homicide are therefore unlikely to be confined to lead investigators and this is another investigative area worthy of research. Surely helping those who investigate such emotionally demanding crimes as child homicide to maintain a healthy wellbeing, is the least we academics can do.

References

Abdollahi, M. K. (2002). Understanding police stress research. *Journal of Forensic Psychology Practice*, *2*(2), 1-24. doi:10.1300/J158v02n02_01

Anshel, M. (2000). A conceptual model and implications for coping with stressful events in police work. *Criminal Justice Behavior*, *27*, 375-400. doi:10.1177/0093854800027003006

¹ An area we hope to explore in the very near future.

- Ask, K., & Granhag, P. (2007). Motivational bias in criminal investigators' judgments of witness reliability. *Journal of Applied Social Psychology*, *37*(3), 561–591. doi:10.1111/j.1559-1816.2007.00175.x
- Association of Chief Police Officers (2005) Practice Advice on Core Investigative Doctrine.

 Bramshill: National Centre for Policing Excellence.
- Association of Chief Police Officers (2005) Guidance on Major Incident Room Standardised Administrative Procedures (MIRSAP). Wyboston: National Centre for Policing Excellence.
- Association of Chief Police Officers of England and Wales (ACPO). (2006). Murder investigation manual. Bramshill: National Centre for Policing Excellence.
- Association of Chief Police Officers of England and Wales (ACPO). (2014). A Guide to Investigating Child Deaths. Bramshill: National Centre for Policing Excellence.
- Fahsing, I. and Ask, K. (2013). Decision Making and Decisional Tipping Points in Homicide Investigations: An Interview Study of British and Norwegian Detectives. *Journal of Investigative Psychology and Offender Profiling*, 10, 155–165. doi:10.1002/jip.1384
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized (pp. 1-20). London, England: Brunner-Routledge Press.
- Finn, P., and Tomz, J.E. (1996). Developing a law enforcement stress program for officers and their spouses. National Institute of Justice, Washington. DC.
- Fyhn, T., Fjell, K., & Johnsen, B. (2015). Resilience Factors Among Police Investigators: Hardiness-commitment a Unique Contributor. *Journal of Police and Criminal Psychology*, 31(4), 261-269. doi:10.1007/s11896-015-9181-6
- Greenberg, N., Brooks, S. and Dunn, R. (2015). 'Latest developments in posttraumatic stress disorder: diagnosis and treatment', *British Medical Bulletin*, 114 (1), 1-9.
- Hart, P.M., Wearing, A.J., and Headey, B. (1993). Police stress and well-being: integrating personality, coping and daily work experiences. *Journal of Occupational Psychology*, 68 (2), 133-157. doi:10.1177/0093854806288708
- Hartly, T.A., Sarkisian, K., Violanti, J.M., Andrew, M.E. & Burchfiel, C.M. (2013). PTSD Symptoms Among Police Officers: Associations with Frequency, Recency, and Types of Traumatic Events. *International Journal of Emergency Mental Health*, 15(4), 241–253.
- Hawkins, H.C. (2001). Police officer burnout: A partial replication of Maslach's burnout inventory. *Police Quarterly*, 4, 343-360.

- Huey, L., and Broll, R. (2015). 'I Don't find it Sexy at all': Criminal Investigators' Views of Media Glamorization of Police 'Dirty Work'. *Policing and Society*: An International Journal of Research and Policy, 25(2), 236-247. doi:10.1080/10439463.2013.864654.
- He, N., Zhao, J., & Archbold, C. (2002). Gender and police stress. Policing: An International Journal of Police Strategies & Management, 25(4), 687-708. doi: 10.1108/13639510210450631
- Kobasa, C., Maddi, R., and Kahn, S. (1982). Hardiness and health: A prospective study. *J. Person. Soc. Psychol.* 42, 168–177
- Kohan A., and O'Connor, B.P. (2002). Police officer job satisfaction in relation to mood, well-being, and alcohol consumption. *Journal of Psychology*, 136 (3), 307-319. doi:10.1080/00223980209604158
- Kurtz, D. L. (2008). Controlled Burn: The Gendering of Stress and Burnout in Modern Policing. *Feminist Criminology*, 3(3). doi:10.1177/1557085108321672
- Lazarus, R.S., and Folkman, S. (1984). Stress, Appraisal, and Coping. New York: Springer
- Liberman, A.M., Best, S.R., Metzler, T.J., Fagan, J.A., Weiss, D.S., and Marmar, C.R. (2002). Routine occupational stress and psychological distress in police. *Policing: An International Journal of Police Strategic Management*, 25(2), 421-441. doi:10.1108/13639510210429446
- Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk factors, and preventive methods for clinicians and researchers. *Best Practices in Mental Health*, 6(2), 57-68.
- Padyab, M., Backteman-Erlanson, S., & Brulin, C. (2016). Burnout, Coping, Stress of Conscience and Psychosocial Work Environment among Patrolling Police Officers. *Journal Of Police And Criminal Psychology*, 31(4), 229-237. doi:10.1007/s11896-015-9189-y
- Potter, W. & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, 27(3), 258-284.
- Roach, J., Cartwright, A., & Sharratt, K. (2017). Dealing with the Unthinkable: a Study of the Cognitive and Emotional Stress of Adult and Child Homicide Investigations on Police Investigators. *Journal of Police and Criminal Psychology*, 32(3), 251-262. doi: 10.1007/s11896-016-9218-5
- Roach J, and Pease K (2009) Necropsy and the cold case. In: Rossmo, K. (ed) Criminal investigative failures. CRC Press, Boca Raton
- Rossmo, D.K. (2009). Criminal Investigative Failures. Boca Raton: CRC Press.

- Salo, I. and Allwood, C.M. (2011). Decision-Making Styles, Stress and Gender Among Investigators. Policing: *An International Journal of Police Strategies and Management*, *34*, 97-119. doi:10.1108/13639511111106632
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, 23(4), 334-340.
- Stelfox, P., & Pease, K. (2005). Cognition and Detection: Reluctant Bedfellows? In M. Smith, & N. Tilley. (Eds). *Crime Science: New Approaches to Preventing and Detecting Crime*. Cullompton: Willan Publishing.
- Taris, W., Kompier, J., Geurts, E., Houtman, D., & van den Heuvel, M. (2010). Professional efficacy, exhaustion, and work characteristics among police officers: A longitudinal test of the learning- related predictions of the demand-control model. *Journal of Occupational & Organizational Psychology*, 83(2), 455-474. doi:10.1348/096317909X424583
- Violanti, J. (1983). Stress patterns in police work: a longitudinal study. *Journal of Police Science Administration*. 11, 211-216.
- Violanti, J. (2005). Dying for the job: psychological stress, disease and mortality in police work. In K. Copes (ed.) *Policing and Stress*. Upper Saddle River, N.J: Prentice Hall.
- Violanti, J., Charles, L., McCanlies, E., Hartley, T., Baughman, P., Andrew, M., Fekedulegn, D., Ma, C., Mnatsakanova, A., & Burchfiel, C. (2017). Police stressors and health: a state-of-the-art review, *Policing: An International Journal of Police Strategies & Management*, 40 (4), 642-656. doi: 10.1108/PIJPSM-06-2016-0097
- Waters, J., Irons, N., and Finkle, E. (1982). The police stress inventory: a comparison of events affecting officers and supervisors in rural and urban areas. *Police Stress*, *5*, 18-25.
- Waters, J., and Ussery, W. (2007). Police stress: history, contributing factors, symptoms, and interventions. *Policing: An International Journal of Police Strategies and Management*, 30 (2), 169-188. doi:10.1108/13639510710753199
- Wright, M. (2013). Homicide Detectives' Intuition. *Journal of Investigative Psychology and Offender Profiling*, 10, 182–199. doi:10.1002/jip.1383