

The effects of investigating homicide on police investigators¹

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Abstract

This paper presents the initial findings of an exploratory study comparing the cognitive and emotional stressors experienced by police when investigating suspicious child and adult deaths (e.g. homicides). The results of an online survey questionnaire with 99 experienced UK police investigators are presented, with key differences found in the cognitive and emotional stress experienced depending on whether the victim was a child or an adult, and key differences and similarities identified in the ways investigators deal and cope with adult and child victim cases. A brief discussion of the implications for the well-being and training of police homicide investigators is also provided.

1. Introduction

Police officers are not impervious to the stresses, strains and pressures associated with their job, particularly those who investigate violent crimes such as homicide (Anshel, 2000; Kohan and O'Connor, 2002; Violanti, 2005). Indeed, few would argue that police officers are not exposed to many acute and chronic life stressors than those in other professions and are more at risk developing symptoms of poor mental health including anxiety, depression and Post-Traumatic Stress Disorder (PTSD) as a consequence. Huey and Broll (2015) found in a recent study with police investigators, that although the public may find police work glamorous and exciting, criminal investigators do not.

This paper presents the findings of a small exploratory study that focuses not just on common *cognitive stressors* (e.g. intrusive thoughts, and the preoccupation with a case) and

¹ This paper is taken from the published article by Roach, Cartwright and Sharratt (2016). Dealing with the unthinkable: a study of the cognitive and emotional stress of child and adult homicide investigations on police investigators. *Journal of Police and Criminal Psychology*. Free to download at <http://link.springer.com/article/10.1007/s11896-016-9218-5>

emotional stressors (e.g. disrupted sleep patterns, low mood, and intense emotional pressure) on homicide investigators, but also whether identifiable differences exist in the form and intensity of these effects according to whether the victims are children or adults. Common ways investigators *deal or cope* with homicide investigations are also identified with again comparison made between adult and child homicide investigations.

Investigating suspicious child death

"Children are not meant to die and the police investigation into the sudden death of a child must be influenced by this basic fact" (Investigating Suspicious Child Death, Association of Chief Police Officers, 2014, p.4).

This quote taken directly from the guidance available to police investigators of suspicious child death (including murder) hints at a discernible difference between how officers will experience (and be affected by) child victim investigations compared with adult homicides. This is not surprising if one considers the unlawful killing of another human being (by means of murder and manslaughter) to be the most serious of crimes, then it follows that when the victim is a child it is all the more heinous (Adler and Polk, 2008; Roach and Bryant, 2015). Additionally, the investigation of the death of a child often carries an even greater weight of investigative sensitivity due to the family's and public's disgust and outrage, and a high expectation that justice will and must be served. Thankfully there is some cause for optimism. John Fox (a former UK homicide detective) states that the police response to suspicious child death has come a long way since the 1990s, when

‘..even if experienced detectives attended (a SUDI².), their basic training in crime scene investigation would sometimes cause them to over-react , thereby causing

² The acronym SUDI (the Sudden and Unexplained Death of an Infant) is not widely referred to in this paper as it tends to be used to describe victims who are young children (often babies) and not older children of 16 or 17 years. As this paper is concerned with the effects of all suspicious child deaths it was not considered inclusive enough to be generically used here.

great distress to bereaved parents, most of whom were innocent of any wrong doing' (2007, p.132).

Quite rightly, much time and space is dedicated to how those close to the victim should be treated in the investigation of a suspicious child death (e.g. *A Guide to Investigating Child Death, 2014*). Although we found research that identified what bereaved parents want and expect from allied professionals (including police) after the sudden death of their child (e.g. Garstang, Griffiths and Sidebotham, 2014³; Garstang, Ellis and Sidebotham, 2015), we did not find anything which mentioned the cognitive and emotional stressors likely to be experienced by police investigators of child homicide (and suspicious child death). In sum, little or nothing is presented about how they might deal with or cope in such investigations.

Coping strategies

So how do police officers cope with the stresses and strains of their job and more importantly how do homicide investigators? Academic research in this area has identified a number of different 'coping strategies' used by police officers. Waters, Irons and Finkle (1982) for example, suggest that these can be categorized according to; the source of responsibility, the individual officer, or the Department (1982). Of most interest to us here, individual coping strategies include:

- 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)

³ Provides an excellent meta-analysis of the literature in this area.

- 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)

What is not known is (1) how these or others (or these plus others) are used by homicide investigators and how frequently, (2) how they manifest themselves, and (3) whether the same stressors and coping strategies are visible for both child and adult investigations? The answers hold important implications for the welfare and future training of homicide investigators and constitute the primary focus of this paper.

The present paper

As the present paper is the first to focus on this area, it is completely exploratory in nature and indeed simply represents the first stage of a wider study of the cognitive and emotional stressors of child homicide investigation on police investigators. The findings presented are from a survey based study that aimed to identify whether police homicide investigators had experienced different cognitive and emotional stressors (in form and intensity) when investigating child and adult homicide cases, and how they dealt or coped with these? Our sincere gratitude to those of you who gave up their time to contribute to our study.

2. Method

The present study employed a within subjects questionnaire design comprising of three sections.⁴ The *first* section focused on respondents' demographics (e.g. age, police experience, marital status) followed by a *second* section designed to measure the level of homicide investigative experience, for both adult and child cases. The *third* section sought

⁴ A full copy of the survey questionnaire is available from the corresponding author.

to identify the impact of investigating homicide on different forms of cognitive and emotional functioning, with respondents asked to respond to 12 five-point scale questions (ranging from 1 strongly disagree to 5 strongly agree) first on the effects of adult homicide and then with regards child homicide investigations. The presentation of both was randomised to control for order effects. This section focused on what respondents experienced with regard to emotional and cognitive stressors such as; pressure to solve a case, sleeping patterns, their perception of case complexity, intrusive thoughts regarding cases, the effect on personal and social life, and their ability to think clearly. Questions also explored the different coping strategies employed when conducting suspicious death investigations, for example; the importance of the support of colleagues, their reliance on instinct, and their reliance on the investigative guidance and manuals available. The *fourth* and final section of the survey questionnaire asked respondents to answer 13 five point-scale questions that focused specifically on how they dealt with (or are dealing with) the cognitive and emotional effects and stressors in their *most recent child homicide investigation*. This section orientated the respondent's thoughts, feelings and experiences in relation to: their level of focus and concentration, their emotions; any coping strategies employed, job satisfaction and any intrusive thoughts relating to their most recent child homicide case.

Procedure

Police investigators were invited to take part in the present study through the UK National Police Chiefs' Council (NPCC - ACPO as was), Homicide Working Group, Child Death Sub-group's email register. Respondents were asked to take part if they had experience of investigating both adult and child homicides. Following the initial email to members of the group, the sampling took a snowball approach whereby they were asked to forward the email to colleagues that met the survey criteria. In the email, respondents were provided with a survey information sheet and with a URL link to the study (hosted using Qualtrics software). All respondents were informed that their participation was entirely voluntary, provided with and an electronic consent form, and asked to work through the questionnaire, which took no longer than fifteen minutes to complete.

3. Results

Survey questionnaire part 1 - Respondent demographics

99 Police officers with experience of investigating both child and adult homicide cases from 23 different Police Forces across England and Wales were kind enough to take part in the study. 90.80% described their ethnicity as; White British, White or White European. The majority of respondents were detectives of differing rank ranging from Detective Constable (DC) to Detective Chief Superintendent (DCS) with a further 11.10% of respondents holding different roles (namely scenes of crime officers). 78.8% (n= 78) stated that they were married. 83% had children.

Survey questionnaire part two - Investigative Experience

In this section, police respondents were asked to state their investigative experience in years with the average amount of experience respondents had of investigating suspicious death cases was 11.86 years (SD, 6.82, n=99). The average number of cases respondents had investigated where the victim was an adult was found to be 30.66 cases (SD=31.86, n=58), which was more than four times the average number of suspicious deaths where the victim was a child (M=7.03 cases, SD, 8.83, n=73).

The average number of unsolved investigations which respondents had worked on where the victim was an adult was 2.37 cases (SD, 4.87, n= 86). Where the victim was a child, it was again much smaller at 0.51 cases (SD, 1.20, n=88). The ratio of adult to child investigations found in the present study reflects the general patterns for adult and child homicide in the England and Wales (Brookman, 2005). Where the average time that had passed since the respondents' last investigated a suspicious adult death was 8.58 months (SD=16.46, n=91), for a child victim investigation it was a more distant 22.79 months previous (SD=41.85, n=94).

Survey questionnaire part 3 – Identifying the cognitive and emotional stressors with investigating homicide

Statistically significant differences were found in regard to the pressure felt by respondents when investigating the two different types of homicide, with respondents stating that *they*

feel more pressure to solve an adult homicide quickly than they do a child homicide. A significant difference was also identified relating to the level of complexity experienced in the two types of homicide investigation, with child homicide cases considered more complex and demanding. Respondents also reported that they found the emotional effects of investigating child homicide significantly harder to deal with than that of adult homicides with *the level of intrusive thoughts when not at work*, reported as being higher for child death cases. Finally, respondents reported that *they tended to use the investigative guidance manuals more when investigating the death of a child than that of an adult.* This is probably explained by a combination of the perceived complexity and the relative rareness of child homicide by comparison with adult homicide.

Although the initial findings suggest that discernible differences do exist in the investigative stressors involved with investigating child and adult homicide, the influence (possibly confounding) of several other important factors needed to be discounted before any firm conclusions can be drawn. These are briefly summarised:

First, does the recency of a case account for the difference in effects on investigators? Not from our analysis as we found that those who reported that they had experienced the greatest stressors and effects from investigating child homicide, had not been involved with a case for more than 6 months.

Second, does length of police service account for the differences in effect? Not really according to our analysis. From Pearson correlational analysis conducted to explore the length of service and responses to the questions regarding their most recent child homicide investigation, only a statistically significant positive correlation was found between years in the police service and the *amount of job satisfaction that they felt on the successful conclusion of their most recent child homicide case.*

Third, does the level of investigative experience account for differences in effect in adult and child homicide investigation (the hypothesised direction being the greater the amount of investigative experience then the more likely that any effects and stressors will have been lessened (or moderated) by that experience)? To this end, respondents were asked how many adult and child homicide investigations they had

been part of and the only significant correlation found for adult homicide investigation was for the question *"the support of my colleagues was crucial when I was investigating these cases"*, where a weak but significant positive correlation suggests that the more experienced investigator group found the support of their colleagues more crucial. With regard to child death investigations the only significant correlation found was for *"I felt a lot of pressure to get a result as quickly as possible when investigating these cases"*. Here a weak negative correlations suggested that more experienced investigators reported feeling less pressure to get a result as quickly as possible, than do their more inexperienced colleagues. Overall, the findings suggest that investigative experience in general does not appear to lessen the cognitive and emotional effects experienced by investigators, whether the victim is an adult or a child.

A fourth possibly confounding variable is officer rank. For example, do senior officers experience more or less stressors in investigations than those of lower rank, and does this apply to both suspicious child and adult deaths? To explore this question, respondents were divided into two groups; those of a rank most common for Senior Investigating Officers and those who were not. For brevity, it suffices to say that the findings for the effects adult and child victim investigations were similar, with the SIO group reporting more cognitive and emotional stress than those of lower rank, with the larger effect sizes found with investigating child deaths. In the second stage of this research we have found that this is primarily due to SIO's being (and feeling) responsible for entire investigations

A fifth demographic variable to be considered was whether having children would increase the effects (and their intensity) and stress experienced by investigators of suspicious child deaths? A statistically significant difference was found between the two groups with those without children scoring lower ($M=3.94$, $SD=0.75$) than those with children ($M=4.39$, $SD=0.68$) in response to the statements asking about the *extent to which they can remain focused during investigations and keeping their emotions to themselves during investigations*, those without children reported keeping their emotions to themselves significantly less than those with children. No

further significant differences in answers were found between those who did and did not have children.

A sixth and last possible confounding variable was whether respondents with undetected homicide cases were more affected by their homicide investigations than those without unsolved cases. Put another way, would the unsuccessful resolution of a case add to the cognitive and emotional stressors it and others generate? Independent samples t-tests were conducted using the answers to the statements about experience of investigating child homicides and only one significant difference between the two groups' was found - those in with unresolved cases scoring higher on the statement, *"I tend to find these cases the most complex and demanding to investigate"*.

Survey questionnaire part 4 - Dealing and coping with the effects of the most recent child homicide investigation

The fourth and final section of the survey questionnaire asked respondents how they had dealt (or coped) with the effects of their most recent suspicious child death investigation (some were currently working on them). To explore further our previous finding that respondents reported that with child victim cases the more recent the investigation the less the cognitive and emotional effects experienced. Here respondents were again divided into two groups; those who had investigated a suspicious child death in the past six months and those who had not. Independent samples t-tests were conducted on answers to the statements about dealing and coping with the cognitive and emotional effects generated by these investigations. Some interesting differences were found those who had not investigated a suspicious child death in the last six months scoring higher than those who had not, for the statement, *"remaining focused on what they had to do next"*. A further finding of significance was that the 'not in the past six months group' agreed more with the statement that, *"they could have coped better to a greater extent"*, than those who had not. A final difference found was that the 'not in the past six months group' also agreed more with the statement, *"I avoided people more than normal during the investigation"*, than the within the last six months group. No further significant differences were found between the two groups suggesting that whether respondents' most recent suspicious child death

investigation was in the last six months or longer, it did not appear to influence how they dealt with the effects generated by it.

Having earlier identified that respondents of SIO rank reported feeling the stress effects of investigating child homicide greater than their less senior counterparts, it was considered important to explore whether they dealt differently with these. A difference was found in their response to, *"I saw it as my problem and doubled my efforts to solve it"*, where those in the SIO group indicated that it had more effect on them than the non-SIO group did

Lastly, the question whether of levels of investigative experience had any influence on respondents' coping strategies when investigating child homicides was explored. Pearson's correlational analysis was conducted with the number of child homicides each respondent had investigated. A significant weak positive correlation was found between the number of child homicides investigated and respondents' responses to the statement, *"I hoped that the investigation would solve itself"* ($p=.05$) with a further significant weak negative correlation found ($r=-.28$) for *"I found someone who was a good listener"* ($p=.05$). More experienced officers reported being less likely to *seek out somebody to talk with* during an investigation than their less experienced counterparts. This is further supported by finding a positive weak correlation ($r=.270$) found for child homicide investigation experience and *"I kept my emotions to myself"* ($p=.05$). No further significant correlations were found for this section on strategies to deal with the effects of child homicide investigation, according to levels of investigative experience.

Survey questionnaire part five - Free-text answers

The final section of the survey questionnaire gave police respondents the opportunity to add their own thoughts on the cognitive and emotional stressors experienced in child homicide investigations. These were thematically analysed and coded by two of us and the common broad themes identified and agreed. These are briefly presented below.

- 1. Emotional effects and affects** – Respondents acknowledged that suspicious child death investigations generally affected them more than adults victim investigations, for example

“Child murders DO have an additional effect on me when investigating those offences, more time, effort and thought is given, in short we go the extra mile. These cases do stick in your memory much more firmly and for longer” (54).

“I find, that the hardest part in these investigations, are interviewing eyewitnesses and next to kin”. (71).

2. Pressure and drive to get a result – Respondents stated that child homicide investigations often came with added pressure to get a satisfactory result, for example

On the whole, I feel that our team is motivated more when dealing with suspicious child deaths”. (45)

“The worst part for me is the dread of not getting the right result at the end. Families are already devastated. Quite often the only ways these people can have closure is knowing that justice has been done.” (80).

3. Dealing or coping with child homicide investigations – Different but common coping strategies used by child homicide investigators were identified by respondents, for example

“In my view the most effective support when dealing with such investigations, is the support of your work colleagues. If the death has a traumatic effect on officers, you are less likely to share it with close family or friends for fear of upsetting them also. However, for each and every case I have dealt with, I have felt it was a privilege to be a part of the team investigating the circumstances of the death, especially if there is a successful conclusion at court”.(7)

“For an investigator the Achilles heel to any homicide or serious investigation is to become emotionally involved. Letting emotions influence your thoughts often tend to mean that you are not able to base your decisions on the facts alone. Decisions based upon the facts and not emotions are the key to bringing an investigation to a successful resolution which in turn is in the interest of the victim and their family as well as justice. For that reason, some Police officers may seem dispassionate, sterile

or old to emotions but this is a self- imposed safety mechanism which has been placed in order not to become exposed or overwhelmed by trauma, grief, or anger. If you allowed these factors to get the better of you, then you would never be able to get out of bed in the morning for your next victim or their family". (28)

4. Case complexity – Respondents generally felt that child homicide cases were often more complex investigations, particularly with regard to dealing with a plethora of different agencies and with conclusions from post mortems, for example

"Child death is more complicated as the suspect, often the parent, may not have intended the child to die as a result of their actions and are also mourning the loss of their child". (19)

"Child death investigations are complex but from an investigative perspective they are a murder. Managing the investigation as a murder keeps it on track. There are added issues i.e. care proceedings, review but the process is the same". (44).

5. The aftermath - Most poignantly perhaps, some respondents identified the difficulty with dealing the effects of a child homicide investigation sometime after it has come to an end, for example

"Despite advice from many experts we could not establish a cause of death, as one eventually said "she just gave up". The carers did not care about the death they were more interested in securing their next fix and avoiding responsibility. I have reflected many times on the investigation and what else I, as SIO, could have done to secure justice. I'm not sure there was much, if anything, but that does not stop me feeling I failed and let the child down". (78).

Although only briefly presented here, the themes identified from respondents' free-text responses have been used to guide our semi-structured, one-to-one interviews with child homicide investigators, in stage two of the project.

4. Discussion

The findings of the present study, although admittedly only exploratory in nature, do provide evidence to support the idea that police investigators experience different cognitive and emotional stressors and effects when investigating suspicious child deaths, compared with that of adult ones. The findings highlighted several common ways by which investigators deal with the cognitive and emotional stressors and effects from investigating suspicious child death (e.g. support of colleagues) but the surface is merely scratched here. Further research is needed to illuminate specifically how investigators cope with the effects of such heart-breaking investigations both 'positively' (e.g. sport and physical exercise and sharing thoughts with loved ones) and 'negatively' (e.g. having trouble sleeping or drinking more than usual). Again areas we are exploring in one-to-one interviews in a second paper.

One possible outcome of this research might be the development of a bespoke self-report questionnaire for homicide investigators to complete both during and after an investigation (e.g. six months later) to help them to self-assess the effects of an investigation is having and has had on them. It is common, however, for investigators to be involved continuously with homicide investigations without a sufficient break in time with which to reflect. Further research is needed to explore how investigators deal any possible cumulative effects.

Practical implications for police homicide investigators

The findings of this study have several important practical implications for understanding how the cognitive and emotional stressors in child homicide investigation affect investigators' in different ways and different levels of intensity compared to adult homicide investigations. These are summarised briefly below.

First, those who have not been involved in a suspicious child death investigation for more than six months reported the cognitive and emotional effects to be greater than those who had conducted more recent investigations. This is important as it suggests that a significant period of reflection is needed after the investigation has ended in order for investigators to realise the true extent of how their investigations have affected them. It is likely that during an investigation the need to resolve a case satisfactorily and as quickly as possible, will

perhaps mask (or delay) the true effect that such cases have on police investigators. Interestingly, this was not found to be the case with adult homicides, suggesting an important area of training for investigators of child homicide whereby they are made aware of the common investigative effects (including cognitive and emotional bias) associated with this type of investigation and when they are most likely to occur. In addition, this finding emphasises the necessity for investigators to be offered the opportunity for full discussion of the investigation six months after completion; by offering targeted support and discussions of how the investigator has been since the investigation ended will allow forces to deploy effective and meaningful support. Indeed this is an avenue that we are currently exploring using semi-structured interviews with police homicide investigators, to identify how individual forces can better support those who have to deal with cases of suspicious child death in the future.

Second, the present study has provided evidence that investigative experience does not seem to protect investigators against the effects of homicide investigation, whether the victim is an adult or a child, suggesting that a de-sensitisation does not kick-in for many. Indeed we found little evidence that length of police service provides little by way of protection against the stressors of suspicious child death investigations, as was found to be the case in studies of stress in more mainstream policing roles (Violanti, 1983; Patterson, 1992). We intend to explore this more in future interviews with police homicide investigators as the results of the present study suggest that those who have more child homicide experience tend to hope the investigation will solve itself, and tend to internalise their emotions not seeking support from others; presenting implications for those who may be the dedicated well experienced child homicide investigator.

Third, respondents reported that *they tended to use the investigative guidance manuals more when investigating the death of a child than that of an adult*. This is probably best explained by a combination of the perceived complexity and the relative rareness of child homicide in comparison with adult homicide. This does offer some justification for the existing ACPO guide specifically for investigating suspicious child deaths, but that there is a need for further and additional guidance for police investigators in this area which includes what the likely cognitive and emotional investigative effects and common stressors are and how investigators might recognise and deal with them.

Fourth, as those investigators with children (particularly young ones) reported being most affected by suspicious child death investigations, it suggests as much as they might try, work-life separation is difficult in these circumstances, making them particularly vulnerable to the emotional effects of such investigations. This is an important practical implication that has the potential to adjust the ways in which investigators are deployed.

The present study like all research has limitations that must be acknowledged. Firstly, 99 respondents may seem too small a sample size, but the truth is that it is impossible to say how many detectives in England and Wales have experience of investigating both suspicious adult and child deaths. The NPCC, Child Death Sub-Group, emailed a link to our survey questionnaire to their members on our behalf. Police investigators from 30 of the 43 (70%) Police Forces in England and Wales, responded to the survey, adding support to the claim that the findings were representative to a satisfactory degree. Second, it was decided that the present study would not look for differences according to gender and so respondent gender was not asked for, which with hindsight might have been a mistake. Whether, for example, female investigators deal or cope differently with the investigative effects than their male counterparts? Judging, however, from the names in the email addresses left by those prepared to take part in a second stage of the study, no more than 10% of respondents were female. We intend to target a number of female investigators for interviewing in stage two.

In sum, the present study suggests that police homicide investigators do experience different cognitive and emotional effects (in both type and intensity) when investigating child as opposed to adult homicides. It is acknowledged that this is merely a starting point and we hope to report our findings from the second stage of the project very soon, whereby we have conducted 20 face-to-face interviews with police investigators which explore how investigators identify and deal with these effects (both commonly and individually). We hope to expand to include other professionals involved with the suspicious death of a child, such as paediatricians, child protection professionals, pathologists, and Scenes of Crimes Officers (SOCO's). Such research must continue to explore how investigative decisions are made in such difficult and stressful circumstances, if we are to give those good enough to do it as much self-protection as possible.

References

- Adler, C. and Polk, K. (2008). *Child Victims of Homicide*. Cambridge: Cambridge University Press.
- Anshel, M. (2000). A conceptual model and implications for coping with stressful events in police work. *Criminal Justice Behavior*, 27, 375-400.
- Association of Chief Police Officers of England and Wales (ACPO). (2014). *A Guide to Investigating Child Deaths*. Bramshill: National Centre for Policing Excellence.
- Brookman, F. (2005). *Understanding Homicide*. London: Sage.
- Fox, J. (2007). Police Investigation in Unexpected Childhood Deaths. In P. Sidebotham and P. Fleming (Eds.) *Unexpected Death in Childhood. A Handbook for Practitioners*. Chichester: John Wiley and Sons. 132- 153.
- Garstang, J., Griffiths, F., and Sidebotham, P. (2014). What Do Bereaved Parents Want From Professionals After the Sudden Death of their Child? A Systematic Review of the Literature. *BMC Pediatrics*, 14: 269.
- Garstang, J., Ellis, C. and Sidebotham, P. (2015). An Evidence-Based Guide to the Investigation of Sudden Unexpected Death in Infancy. *Forensic Science and Medical Pathology*, 11: 345-357.
- 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.
- 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.
- Patterson, B.L. (1992). Job experience and perceived job stress among police, correctional, and probation/parole officers. *Criminal Justice Behaviour*, 19 (3), 260-285.
- Roach, J. and Bryant, R. (2015) 'Child Homicide: Generating Victim and Suspect Risk Profiles' *Journal of Criminal Psychology*, 5 (3), pp. 201-215.
- Violanti, J.M. (1983). Stress patterns in police work: a longitudinal study. *Journal of Police Science Administration*. 11, 211-216.
- 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, Vol.5 (1)*, 18-25.