

Police Officers' Perceptions of their Reactions to Viewing Internet Child Exploitation Material

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Abstract The purpose of this paper is to extend prior research on the impact of working in the area of Internet Child Exploitation (ICE) investigation by exploring ICE investigators' perceptions of and reactions to viewing child exploitation material. A diverse sample of 32 ICE investigators across all nine Australian jurisdictions individually participated in anonymous in-depth interviews. Participants were asked to discuss their subjective experience of viewing ICE material and its effect on them and to describe a case that evoked an adverse reaction, the nature of the reaction, and the characteristics of the material that contributed to it. The results revealed that ICE investigators experience salient emotional, cognitive, social and behavioural consequences due to viewing ICE material and their reactions can be short and long term. The degree of negative impact appears to vary markedly across individuals, types and content of material and viewing context, with variation based on individual, case-related and contextual factors both in and outside the workplace.

Keywords Internet child exploitation material · Child pornography · Child sexual abuse images · ICE material · ICE investigator reactions

Introduction

Internet child exploitation (ICE) material, commonly referred to as internet child pornography or child sexual abuse images, refers to sexualised depictions of children produced, distributed, accessed or stored via various internet facilitated paths such as webcams, bulletin boards, email, websites and peer-to-peer networks (Beech, Elliot, Birgden, & Findlater, 2008; Prichard, Watters, & Spiranovic, 2011). Although the creation, access, distribution and trade of ICE material are illegal in many countries, the demand is considerable (Internet Watch Foundation, 2011; National Center for Missing & Exploited Children, 2012; Ropelato, 2007; Steel, 2009). For instance, the Internet Watch Foundation identified 13,161 websites containing ICE material, with new websites being continually identified. Many offenders access large volumes of material, often thousands or millions of images, stories and videos. The nature of ICE material varies widely in terms of explicitness and severity of victimisation. Images found on computers may range from non-sexualised images of children in clothing catalogues through to images of adults sexually abusing children and infants in ways that depict rape, torture and bestiality (Bokelberg, n.d; Taylor, Holland, & Quayle, 2001).

Law enforcement remains the major tool for the investigation and prevention of ICE-related offences. When material is initially identified, the investigative response must be swift, requiring examination of hard drives to establish ownership and the content of files. While ICE investigators' tasks are multi-faceted (e.g., involving proactive engagement with offenders online through covert operations, giving evidence in court, liaising with victims, executing search warrants), a large

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part of their role involves accessing, preserving, collating and presenting evidence in a form that meets legal requirements. Each individual item (image, story, or video) must be classified for severity and catalogued so that appropriate charges can be laid and offenders (if convicted) can be sentenced appropriately.

The nature of ICE material poses a potential threat to the occupational health of law enforcement officers who investigate these crimes. The potential for harm to investigators can be seen in Brown, Fielding and Grover (1999) and Violanti and Aron (1995) where exposure to abused children, sexually or otherwise, was identified by police officers as one of the more disturbing stressors encountered in the workplace. Sexual abuse of children is perceived by officers to simultaneously violate bodily norms and individual's rights and severely harm children, thereby arousing intense moral disgust and anger (Russell & Giner-Sorolla, 2013). Edelman (2010) reported that emotional responses to exposure to ICE material, in addition to cognitive and psychosexual/interpersonal effects, are possible pathways of harm to investigators.

From a workplace health and safety perspective, police organisations bear some responsibility for protecting the health of ICE investigators. Although many organisations try to enforce time limits on exposure to ICE material (in terms of the number of years an investigator can work in an ICE unit and the number of consecutive hours an investigator can view ICE material) this is a complex and contentious issue. Restricted investigation time frames, limited staff budgets and the highly specialised nature of these investigations (where expertise can take months or years to develop) means that individual police ICE experts may be viewing material over long (i.e., full day) shifts and for weeks at a time (Powell, Cassematis, Benson, Smallbone & Wortley, *in press a*). Although software that automatically scans a library of images and identifies previously graded material is available (e.g., see Jones, Pleno & Wilkinson, 2012), such technology merely reduces double handling of evidence; it does not eliminate the need to view new material. Further, most investigators complain of limited access to this software (Powell et al., *in press a*).

So, how well do ICE investigators (as a group) cope with their work demands? The research is limited, but findings so far indicate that although ICE investigation work is associated with numerous workplace stressors,¹ most ICE investigators claim they are managing well (Bokelberg, *n.d.*; Powell,

Cassematis, Benson, Smallbone & Wortley, *in press b*; Wolak & Mitchell, 2009). Further, of all the workplace challenges investigators face, viewing ICE material is not necessarily perceived to be the most stressful facet of ICE investigation (Bokelberg, *n.d.*; Perez, Jones, Englert & Sachau, 2010; Powell et al., *in press a*; *in press b*). The fact that officers are coping well is supported by studies using in-depth interviews with ICE investigators (Powell et al., *in press b*), as well as studies showing that the mean level of subjective wellbeing (using robust psychometric measures) is well above the Australian adult normative range (Tomyn, Powell, Cassematis, Smallbone & Wortley, 2013). Further, the conclusion is supported by the ease in which investigators discuss an array of personal coping strategies known to be effective in other fields (Powell et al., *in press b*) while failing to spontaneously mention ICE material as a stressor within the same interview (Powell et al., *in press a*).

The resilience of ICE investigators as a group, and their emphasis on the impact of organisational stressors over and beyond the ICE material, *should not be taken to mean that viewing ICE images does not cause harm*. Research suggests exposure to ICE material can be detrimental to some investigators, with physical, social and mental wellbeing declining as exposure to ICE material increases. For example, Krause (2009) and Burns, Morley, Bradshaw and Domene (2008) attributed symptoms of secondary traumatic stress disorder such as intrusive imagery, hyper-vigilance (with regards to child safety), moodiness, and avoiding discussion of work, to continual exposure to ICE material. Perez et al. (2010) also reported that secondary traumatic stress disorder in ICE investigators increased as exposure to ICE material increased. Social problems associated with ICE investigation include reluctance to interact with children, withdrawal from social activities with family, friends or partners, generalisation of the negative opinion of (mostly) male offenders to all males, isolation from other law enforcement personnel and decreased desire for physical intimacy within marital relationships (Burns et al., 2008; Bokelberg, *n.d.*; Krause, 2009; Wolak & Mitchell, 2009; Perez et al., 2010). Physical complaints reportedly experienced by ICE investigators include headaches, intestinal upsets, severe tiredness, sleep deprivation, depressed immunity, elevated heart rate and general ill health (Burns et al., 2008; Bokelberg, *n.d.*; Krause, 2009).

Understanding the nature and degree of threat posed by viewing ICE, however, is still in its infancy. The nature and impact of ICE material has been a peripheral concern of prior work, which has focused more on stress reactions to ICE work as a whole. It is difficult to delineate responses to viewing material as distinct from other case-related duties of ICE investigators. Overall, what we have ascertained from the limited interviews with ICE investigators conducted in prior research is that reactions to ICE material are not consistent across viewing situations and that media format and content

¹ Stressors reported in previous ICE specific research include misfit between prevalent police culture and ICE investigation, constant evolution of software and hardware, enforced interdependence between different occupational groups (for example police, lawyers and cyber-forensic specialists), shortage of suitable personnel, excessive workload and self-perceived personal responsibility for saving victims, technological limitations of their equipment and unsuitable workspaces, internal bureaucracy, collaboration between uncoordinated legal systems and the need to work long shifts at unusual hours. (Bokelberg, *n.d.*; Jewkes & Andrews, 2005; Krause, 2009; Powell et al., *in press a*; Wolak & Mitchell, 2009).

may underpin varied responses. For example, live web feeds are anecdotally reported as most distressing to watch, followed by video with audio, video (no audio) and with stills being the least disturbing (Bokelberg, *n.d.*; Krause, 2009). Younger victims (e.g., infants or very young children) tend to elicit more distress in investigators compared to older children and adolescents, especially when the images show visible terror and pain in the victim (Burns et al., 2008). The aim of this study is to further expand our understanding of investigators' experiences of viewing ICE material with the aim of generating suggestions for how organisations could best minimise potential harm.

Specifically, the current study extends prior work by allowing a relatively large and heterogeneous sample of ICE investigators the opportunity to talk in-depth about their experiences of, and reactions to, viewing ICE material. We encouraged the officers to elaborate on the properties related to the material and other conditions which increase disturbance, the perceived cause of the varied reactions, the nature and duration of investigators responses to ICE material and the association between different responses and types of materials. Importantly, unlike prior work using face-to-face interviews or focus group (e.g., Bokelberg, *n.d.*; Burns et al., 2008), our interviews were truly anonymous. Responses were gathered via telephone without any personally identifying information being requested from the participant during the scheduling or actual interview process. Importantly, the interviewers were skilled in using non-leading open-ended questions that 'cast the net' wide, allowing officers to define for themselves their experiences when viewing ICE material.

Method

Participants

The participants were 32 personnel, from the nine jurisdictions across Australia, with experience investigating ICE offences. Participants were recruited with the assistance of managerial staff overseeing ICE investigators in each jurisdiction. These managers were approached by a police officer (the main project liaison) by email and asked to forward information onto staff members about the purpose of the project. Staff members who wished to be involved in the study were invited to take part at a time of their choosing, in an anonymous telephone interview. Participants were assured of anonymity and were only identified to researchers by a numerical code. Demographic details, which were sought from the participants at the time of the interview, confirmed that the sample was heterogeneous. The sample consisted of 10 females and 22 males. Two participants were unsworn employees. Four participants had left ICE investigation (ranging from one month

to one year ago) with 28 still currently involved in ICE investigation. Reasons for leaving the area of ICE were predominantly to progress careers (e.g., a promotion), with one participant indicating poor mental health as the reason for leaving. Tenure of employment with a police organisation ranged from 4–34 years ($M = 15.60$ years). Tenure in ICE investigation ranged between 1–25 years ($M = 5.02$ years). The sample included three computer analysts, 23 detectives and sworn police members of various ranks, four ICE supervisors and two trainers.

Procedure

All interviews were administered by two research academics in our team. These interviews ranged in duration from 28 to 132 minutes ($M = 58$ minutes, $SD = 17$ minutes) and were conducted between the months of February 2011 and February 2012. All interviews were conducted over the telephone. A semi-structured interview schedule was used. The interviewers were largely passive participants, asking only broad open-ended questions to encourage elaboration and to seek clarification (both were experts in interviewing, having received intensive training around open-ended questioning techniques and demonstrating these in several interviews unrelated to the current study). Participants were initially invited to talk about their subjective experience of working in the area of ICE investigation and to discuss the challenges and coping strategies in the workplace. Materials were not highlighted to be a major stressor or a particularly traumatic facet of ICE investigation in the initial phase of the interview. Challenges referred to related to three areas; work relationships, workload and resources, and the physical environment. The results of this initial phase of the interview are reported in a preceding study (Powell et al., *in press a*).

At the completion of the initial interview section, the questions focused solely on the topic of the materials (the focus of the current paper). The participants were invited to answer two prompts which took on average 20 minutes to complete. The first prompt was as follows: "Please talk specifically about the actual case material you deal with on a day-to-day level and your subjective experience of working with this material (i.e., its affect, if at all, on you personally or others in your workplace)". Secondly, investigators were asked to: "Think back to a particular case that you worked on or heard about, that stood out in that it evoked an adverse psychological or physical reaction (however brief). Please describe your reaction, its longevity, and what it was about the case that led you to react the way you did". In relation to the second prompt, interviewees were asked to elaborate on the consequences of viewing this case material and how they dealt with the reaction.

Data Management and Analysis

All interviews were audio taped, transcribed verbatim and double-checked for accuracy. The analytical techniques employed were inductive and based on the principles of thematic analysis, which involves identifying themes, categories, and interrelationships in the text to aid description and interpretation of participants' experiences (Gifford, 1998). The process of extrapolating key themes within the data set began with two of the researchers independently reading all of the interview transcripts and making elaborate notes about the experiences of working with ICE material. These researchers then met to identify common themes. A coding manual was developed and all of the participants' comments were subsequently re-read and coded and a table of all responses relating to ICE material was developed. The table included (a) factors of the material and cases that were perceived to be particularly offensive, (b) physical and psychological reactions to material and (c) any effects the material had on individuals (personally or on others). Quotations are provided to support the results; grammatical changes were made to these quotations where appropriate to improve flow and clarity, and detail that could potentially lead to the identification of individual participants was removed.

Results

Participants' perceptions of the nature of, and their own personal reactions to viewing, ICE material varied considerably. A few participants described themselves as 'secondary victims' as a result of viewing this material. The majority of participants felt, however, that while viewing ICE material was disturbing and unpleasant, and is more confronting than the material that police who investigate other sex crimes are exposed to, ICE investigation did not pose any greater risk of harm compared to policing in general. Indeed, some participants speculated that viewing ICE material posed less risk of psychological harm (overall) than face-to-face interaction with victims of assault.

"Things that often involve serious pain or death to a person, a police officer tends to remember. I don't see that movie (*of abuse*) as anything that is particularly different to what any other police officer might experience in their duties, like pulling some kid out of a wrecked car or something like that."

"This is no different to working in any other area of policing. You go to bed and you have something on your mind but that's not specific to ICE. It can be in any policing area."

"There's a second category of a victim here- the people that originally got offended against and then the people

in law enforcement who get exposed to this material. Innocence is something you have until it's taken away from you by being exposed to this material or actually being abused. There are plenty of people in the world who are innocent; in fact 90% of the people in the world are innocent. They have a lack of understanding of the nastiness and evilness of the human conditions, and that's a good thing for them because if they lose that they don't get it back."

The issue of desensitisation to the material was discussed by most participants, however opinions varied as to how this manifested itself and to whether this process was personally beneficial. Some described desensitisation as the development of an un-empathetic 'hardened' and flippant attitude. Others considered that desensitisation manifests not as loss of empathy, but rather as an asset which increases their capacity to engage with the material from a more analytical and legislative perspective. Arguments were provided for and against whether empathy was needed to maintain long-term productivity, was disrespectful to victims, and whether it was a personal and professional virtue.

"I think the fact that something is shocking is a good thing in the sense that it shows that you're still human. To become desensitised is the wrong way to go. I think you always have to acknowledge that what you're viewing is offensive and terrible. I think if you lose that empathy of kids suffering, your work suffers. You're motivated to do the job because you want to do something to address the exploitation of children and suffering of children so to become desensitised to that I think you undermine your ability to do the job."

"Initially when you first start off the material kind of throws you a bit but after a while you just get on with the job without thinking about it. When I'm ploughing through thousands of images to grade them on victim ages, I'm not continually saying 'Oh my God! Oh that's shocking!' Rather, I'm saying 'That's young. That's young. Don't know about that one. No she's older. He's older'. Just ticking boxes off to get the job done."

Adverse Reactions to Material

Participants, as a group, indicated their reactions to abhorrent ICE material were generally, although not exclusively, short-term. Typical descriptors of the material included; disgusting, disturbing, grotesque, horrific, gory, and repulsive. Typical descriptors of reactions while viewing the material included nauseous, sad, angry, frustrated, shocked, feeling sorry for the victim, mentally draining and demoralising.

“I just feel mentally drained and fragile; totally exhausted. It’s like you’ve been up for three days studying or working, but you’ve only viewed the material for four or five hours. You feel saddened at times by images. There will always be something new that your brain registers that you’re seeing, whether it’s an infant or animals and kids or something like that. I think the first time you see the image, it gives your body a shock again and you feel saddened and later maybe anger but then you see that image again and again and your body probably gets used to it. It’s not until something new comes along again that you probably react again.”

Some participants reflected on the issue of arousal to the material in the context of their own experiences (in all cases male), or the potential reactions of others. Arousal was never described in psychopathological terms, but rather a spontaneous reaction to normal (adult) pornography which was mixed with the child pornography, and when physically developed adolescent children were hard to distinguish from adults. All participants who raised the issue of arousal said that while it was possible to speak about it in the anonymous research setting, it was never discussed between colleagues.

“People with child porn generally have all forms of pornography on their computer - from animals right through to normal heterosexual pornography. The normal stuff can trigger arousal – a normal physiological response I guess but it’s definitely not discussed. That would be probably a topic that no-one would discuss with each other. But being anonymous I can certainly say that looking at pornography arouses me full stop.”

Longer lasting responses to viewing particularly offensive ICE material were also discussed. Responses included; anger and antipathy toward the offender, difficulty sleeping and ‘switching off’ at the end of the day, ICE-related intrusive thoughts and flashbacks outside of work and in dreams, reduced interest in intimacy (both emotional and physical) with one’s partner and with normal pornography, discomfort engaging in routine physical interaction with one’s own children, and emotional reactions such as exhaustion, irritability and numbness. When the duration of these symptoms was mentioned, the minimum was two to three hours and the maximum was up to a week.

“When I first see a new image I can have flashbacks of that image. Clear crystal crisp images that will last a day or night and then after a period it’ll come every couple of days. I’ll be doing something like watching TV or be on the computer and for some reason that image will just come into my head. I have to shake my head and go ‘No!’ and then it’ll go away.”

“The [image] affected my sleep. I closed my eyes and I could just see the kids tormented over and over and over

and that probably caused psychological distress for two, three, four days after each time that I had to look at that particular image.”

“I don’t like to have sexual intercourse with my wife during the period that I’m viewing because, for whatever stupid reason, the images come into my head involuntarily and I can’t always control them. It’s hard to try and get aroused when you’ve spent five hours looking at babies being abused or something like that.”

Several participants also reported developing a more generally negative view of the world and their place within it. This manifested in diverse ways such as greater distrust and intolerance of others, overprotectiveness of their children, and increased feelings of helplessness and sadness. It was not always clear to participants, however, the degree to which the negative reactions were due to ICE material or to other stressors within the work environment. Further, not all participants reported negative reactions to viewing ICE material. Some reported being unaffected by ICE material, and two participants reported that ICE investigation had a positive impact in terms of increasing their understanding of children and their needs.

“If you spend a long period of time of your day viewing material it affects your mood. People around me said that I became quiet and withdrawn whilst being in the unit. Before I used to talk about a lot of things, but ICE is not the sort of thing that you talk about. I always used to have a sense of humour. They said I didn’t laugh much anymore. I’m a lot more serious.”

“Well it’s one of those things where you look at people differently, you assess things differently. It’s more of an awareness I think or a paranoia that when people are around your kids and you see your kid running around naked or whatever, you’re thinking ‘who else is looking?’ You’re very mindful how you pick up your children and what you do with them. I think that you just naturally get like that when you view these images and deal with these types of offenders.”

“I think of the way that I was before I came to work in ICE to the way I am now- I’m a totally different person. It’s not necessarily a bad thing. If anything it may have affected me in a positive way. I think beforehand I was a lot more trustworthy, especially with friends and family - too much so. My brothers or sisters tell me about what they’re letting their kids do and I often get into arguments with them saying ‘you shouldn’t be letting your kid do that’, but ten years ago I probably would have done the same thing.”

Factors that Influence Reactions

The participants highlighted that reactions to the material were due in large part to the content. The most frequently

mentioned feature (referred to by 21 participants) was age. The material was viewed as most disturbing when the victims were under six years old and when the age difference between the victim and offender was large (e.g., 20 years or over). These age-related factors tended to amplify perceptions of victim helplessness, confusion (i.e., victims' inability to understand what is happening to them) and violations of trust. The degree to which the act violates conventional norms was also raised, not just in the context of victim age but also conventional notions of parenting and sexuality. Examples of extreme norm violation included mothers offending against their own children, bizarre fetishes and bestiality, and violent and sadistic behaviour.

"The worst that you can view is generally involving young children or infants, bondage or bestiality with very young children. It is quite shocking to the human eye and the human brain to see that sort of stuff."

"A mother and father were sexually assaulting their nine-year-old son and they were actually streaming that abuse live over the internet to other people that they were chatting with. That's probably the case that stands out to me to be most disturbing. I can't understand why anyone would offend against a child full stop. I can't understand why anyone would offend against their own child but more than anything a mother. A mother should be nurturing and looking after her child and for her to be involved in that abuse, I found a little bit disturbing."

"You'll find a lot of people who collect child porn will often collect bestiality, defecation, urination and snuff films, so you have to go through them as well. I think a lot of people concentrate on the child porn without considering the effect of this other stuff that you have to look at as well. Personally I find defecation and urination stuff physically sickening. I don't like looking at that sort of stuff and I don't like looking at snuff films, but every now and again you have to and they tend to stick in your mind, just as much as the child porn, if not more."

The emotional reactions of the victims were also highlighted by 18 of the investigators. Evidence of victim distress and suffering was particularly disturbing, with investigators' reactions to this material being compounded when victim distress was deliberately featured for viewer pleasure. Absence of overt signs of distress, however, was highlighted by some investigators as just as problematic. For example, resignation and emptiness in the child's eyes was difficult to watch because it highlighted the non-consensual element of the abuse and the tremendous amount of grooming that the child had endured.

"You're seeing the expressions on their faces, their eyebrows and their temples. All the different expressions of pain, torment, concern and worry. But the worst material is

the kids that have been well groomed who are pretending to enjoy what they're doing. You can see through it- that they're questioning, 'What's going on? Why am I doing this with Daddy?' And they've got to grin and smile. These kids are so damaged."

Another aspect of content reported as exacerbating aversive reactions by five of the investigators was the offenders' appearance. Physically unattractive offenders were perceived as particularly repugnant as was the overt display of sexual gratification.

"The combination of age differences and, I suppose you'd say, a deviation to my normal sexual preference - a balding middle-aged unattractive male with a potbelly and a little kid who is too young to know what he is doing."

Participants' reactions to ICE material are not purely dictated by the visual content. The medium of the material and the context in which it was viewed also played a role. Three participants reported that ICE material in the form of written text was the most distressing medium; it forced investigators to create their own mental image and exposed them to the internal perspective and thought processes of the offender. ICE material in the form of video recordings, however, was reported by most participants as being the worst type of child abuse material to view. Video combined with audio and being able to see the child's face, made material more involving, confronting and vivid.

"Quite often reading about abuse is more intense than actually seeing the images. What that does is that you've got to create in your mind your own mental picture, which I think is stronger than just looking at someone else's interpretation when you see an image. You concoct a picture of what the text is saying in your own mind. Some of those have been quite disturbing and I've found that not only for myself but that's the feedback from a number of others as well."

"Another thing that affects me more than seeing the images is watching movies of children being abused. That seems to be a particular issue for some people because with movies comes sound so it makes the abuse more real when you're sitting there watching a video of a child being raped and they're crying out or whatever; it becomes more personal than just looking at a still image. We've got more than one sense that's been triggered, you sort of got your hearing and your sight and you're putting it all together and your brain can tick over a bit."

Finally, a group of contextual factors were described by participants as influencing the risk of aversive reactions perpetuating in the long term. These include; a victim's resemblance to a child known to the investigator (especially one's own child), repetitive viewing of the same item or offender,

watching an offender progress from downloading ICE to contact offending, and the unexpected encountering of ICE material or elements within it.

“I’ve got a four-week old and 23-month-old and I’ve seen images of that age kids being sexually abused- the most horrible stuff you can imagine that you could possibly do to kids. It’s really hard not to look at your own child and almost transpose the image in your mind and go ‘oh my God, how could someone do that to a child?’ You start blurring the borders, you start picturing your own child being abused like that and it really starts weighing heavily on your mind.”

“There was a case involving stalking and indecent deals and I hadn’t noticed that both of the suspect and the victim were male, so it hadn’t crossed my mind that the material I was going to be looking was going to be homosexual in nature. I don’t necessarily have a problem with that straight up, but I certainly wasn’t expecting it. It was a man in his 40s and the kid is in the 5-10 year age range- seeing that combination with homosexuality without being mentally prepared for it was one of my more off-putting experiences I’ve had with child exploitation material.”

Finally, maintaining emotional distance from the material was considered relevant to, and facilitated by, the ability to view material as evidence. The contextual factors that facilitated an evidential perspective included; reading of case files before viewing the material, focusing on the charges and case outcomes, fixating on the elements required for material categorisation, and being able to minimise sound volume without reducing investigative capacity.

“One of the tricks that I’ve learnt is to not become emotionally involved when viewing the material that we’re looking at. Just apply the legislation to it and be ruthless, be clinical about it, don’t get involved in what’s actually being viewed, just apply the legislation to say yep this is illegal material.”

“I approach the material just as a numbers game. I don’t look at it and dwell on what the material is. I don’t think about the picture; I’m thinking about what it means to the job- what it represents, is it in a location that we can use for evidence? How can I use something in the picture? How can I use the picture and the location to tie back to other evidence to secure the case?”

Discussion

The overriding conclusion to draw from these interviews is that ICE investigators experience salient emotional, cognitive,

social and behavioural consequences as a result of viewing ICE material and their reactions can be short and long term. Participants’ descriptions of short term reactions are consistent with the emotions of disgust and anger. Descriptors of long term reactions reflect anger as the dominant emotional response in addition to symptoms of secondary traumatic stress disorder (e.g., intrusive imagery, flashbacks, nightmares and social withdrawal), increased generalised distrust of people, over protectiveness of children, desensitised viewing of ICE material and difficulty in relationships with partners and children. These symptoms have been reported in previous research involving qualitative interviews with ICE investigators (e.g., Bokelberg, *n.d.*; Burns et al., 2008; Perez et al., 2010). The unique contribution of the current study is that the reactions were specifically linked to questions related to the viewing of images (as opposed to broader ICE work). Further, they were identified using a completely anonymous interview environment (which decreases socially desirable responding compared to face-to-face interviews, Jehn & Jonsen, 2010; Krumpal, 2013) and in a sample of professionals who had (earlier in the interview) stated that the material was a negligible stressor (relative to other workplace stressors) and that they were coping well with the job.

It is intriguing that under these current research conditions, ICE material was not spontaneously mentioned as a negative stressor. Only when participants were asked to talk specifically about the influence of case material did responses connect exposure to ICE material to adverse reactions. Negative reactions when noted, were not perceived to be representative of responses to ICE material generally. Unfortunately, the research base is not yet sufficiently large to suggest whether these results are generalizable. The participants represented a small convenience sample, were isolated to one country and the results were purely qualitative in nature. It should be noted, however, that Bokelberg (*n.d.*) also reported that ICE investigators from the US could describe negative reactions to ICE material while not considering the material to be particularly distressing. It is also possible that the current participants had been investigating ICE long enough to have acquired a functional level of desensitisation (for ICE investigation). For example, Bokelberg’s (*n.d.*) participants reported an initial adjustment period to ICE material lasting up to a few months, after which they were sufficiently desensitised and able to work in the ICE area without being overly disturbed by images of child exploitation. The least experienced participant in the current study had been an ICE investigator for one year ($M = 5.02$ years), which according to Bokelberg (*n.d.*) is sufficient time to have adjusted and become desensitised to ICE images.

Similar to previous ICE investigation research (Burns et al., 2008; Krause, 2009), media format was reported to impact responses, with ICE material that combines video with audio being perceived as more impactful than video without audio.

This finding is consistent with the notion that audio transmits unique emotional stimulus related to victim distress, pain, fear, anger and sadness (Esposito, 2009). The issue of whether investigators should be instructed to turn the audio off (or down in volume) is contentious. While it may reduce exposure to distressing stimuli, it also reduces exposure to material that could help to identify and locate a child victim. This is important not only for victims, but investigators as well (as evidenced by their distress at seeing cases progress from downloaded images to contact offences without being able to protect the victims). There is a complex inter-relation between investigators' reactions to material and their own needs for achievement and feelings of self-efficacy, as the arrest of offenders (a major indicator of workplace achievement) makes an important contribution to maintaining investigator wellbeing (Krause, 2009; Perez et al., 2010; Powell et al., *in press b*; Tomynt et al., 2013; Wolak & Mitchell, 2009). One area of future investigation may be the development of decision trees to assist officers in deciding whether the audio content is useful to the investigation and to further develop cognitive strategies (that some investigators already appear to be adopting) in *disengaging* from the emotional aspects of the material rather than physically manipulating exposure to stimuli (Bokelberg, *n.d.*; Burns et al., 2008; Perez et al., 2010; Powell et al., *in press b*).

The proposition that psychological engagement is a driving force underlying investigators' reactions is consistent with the pattern of responses throughout the interviews. For example, the resemblance between a victim and a child known to the investigator increased investigator distress. Text (with no visual or auditory content) was particularly distressing for some participants, which is consistent with the notion that active cognitive processing of the written material would have provided greater scope for emotional engagement on the part of the investigator (Chaiken & Eagly, 1976). Engagement is also central to the processes of desensitisation, heightened reactions to *unexpected* viewing of material, and reported 'flashbacks' for some sorts of stimuli. Generally speaking, distinctive stimuli (distinctive by virtue of their physical qualities and/or position amongst a series of similar stimuli) command more attention from the perceiver and are better represented in memory (Powell, Garry & Brewer, 2009).

Finally, it was evident from this study that, in terms of predicting risk of harm, what makes a specific example of ICE material distinctive depends on a complex array of factors; individual, case-related and contextual factors both within and outside the workplace. The degree of negative impact varied markedly across individuals, materials and viewing contexts. There was no truly universal ICE investigation experience. While overall it could be concluded that feelings of anger and disgust are exacerbated the more the content contained in the ICE material deviates from what is considered 'normal consensual sexual activity' (Bokelberg, *n.d.*; Burns et al., 2008;

Giner-Sorolla, Bosson, Caswell, & Hettinger, 2012; Piazza, Russell & Souza, 2013), this study has clearly highlighted that violation of other social norms (e.g., overt betrayal of trust by caregivers) and personal views and experiences (e.g., views on attractiveness and sexual gender orientation) plays a part as well. Interestingly, exposure to material that is *close* in nature to normal consensual sexual activity (i.e., where legal and moral prohibitions no longer apply) posed a problem as well; this problem is arousal.² The near absence of discussion of sexual arousal in previous research reflects the taboo nature of this topic. The issue of arousal warrants further research as it may well be impacting productivity, be a source of concern or distress for investigations, and could feasibly develop in response to illegal material (Smallbone, Marshall & Wortley, 2013; Wortley & Smallbone, 2012).

There are several implications of this work for police organisations. First, while employees might be coping well overall, the viewing of ICE images *is* potentially harmful (at least in the short term), therefore strategies must be adopted to minimise the level of risk. Second, given the immense variability in reactions and factors impacting responses, it is unlikely that precise prediction of the intensity of an individual investigator's reactions to ICE material is possible. The purchase of technological strategies for global reduction in exposure to images is therefore warranted. Third, although some investigators were clearly able to 'normalise' their reactions, the lack of insight regarding the mechanisms underlying responses suggests the need for more psycho-educational programs for ICE investigators, to monitor, process and deal with reactions in a constructive manner. Prior research shows a global disregard for formal debriefing strategies among ICE investigators, with the biggest perceived limitation of visiting a workplace psychologist being competency. Specifically, ICE investigators complain that psychologists have limited understanding of the challenges that ICE investigators face and the nature of the material they view on a daily basis (Powell et al., *in press b*). This study provides one important step towards articulating the needs and perspectives of ICE investigators from both a therapeutic and work safety perspective.

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² The issue of arousal to ICE material has been non-existent in previous work with two exceptions; Stevenson (2007, as cited in Perez et al., 2010) reported that some investigators were concerned about sexualised thoughts and Wolak and Mitchell (2009) reported that one participant expressed concern about another investigator.

References

- Beech AR, Elliot IA, Birgden A, Findlater D (2008) The internet and child sex offending: a criminological review. *Aggress Violent Behav* 13:216–228
- Bokelberg GA (n.d.) Stress associated with investigating and working in support of investigations of internet sexual crimes against children. (Unpublished study). FBI, Washington
- Brown J, Fielding J, Grover J (1999) Distinguishing traumatic, vicarious and routine operational stressor exposure and attendant adverse consequences in a sample of police officers. *Work Stress Int J Work Health Organ* 13:312–325
- Burns CM, Morley J, Bradshaw R, Domene J (2008) The emotional impact on and coping strategies employed by police teams investigating internet child exploitation. *Traumatology* 14:20–31
- Chaiken S, Eagly AH (1976) Communication modality as a determinant of message persuasiveness and message comprehensibility. *J Pers Soc Psychol* 34:605–614
- Edelmann RJ (2010) Exposure to child abuse images as part of one's work: possible psychological implications. *J Forensic Psychiatry Psychol* 21:481–489
- Esposito A (2009) The perceptual and cognitive role of visual and auditory channels in conveying emotional information. *Cogn Comput* 1:268–278
- Gifford S (1998) Analysis of non-numerical research. In: Kerr C, Taylor R, Heard G (eds) *Handbook of public health methods*. The McGraw-Hill Companies, New York, pp 543–554
- Giner-Sorolla R, Bosson JK, Caswell TA, Hettinger VE (2012) Emotions in sexual morality: testing the separate elicitors of anger and disgust. *Cogn Emot* 26:1208–1222
- Internet Watch Foundation (2011) 2011 Annual and Charity Report. Retrieved from: <http://www.iwf.org.uk/accountability/annualreports/2011-annual-report>
- Jehn KA, Jonsen K (2010) A multimethod approach to the study of sensitive organizational issues. *J Mixed Methods Res* 4:313–341
- Jewkes Y, Andrews C (2005) Policing the filth: the problems of investigating online child pornography in England and Wales. *Pol Soc* 15:42–62
- Jones B, Pleno S, Wilkinson M (2012) The use of random sampling in investigations involving child abuse material. *Digit Investig* 9:S99–S107
- Krause M (2009) Identifying and managing stress in child pornography and child exploitation investigators. *J Police Crim Psychol* 24:22–29
- Krumpal I (2013) Determinants of social desirability bias in sensitive surveys: a literature review. *Qual Quant* 47:2025–2047
- National Center for Missing & Exploited Children (2012) Campaign against Child Sexual Exploitation (CASE) campaign overview. Retrieved from: http://www.missingkids.com/missingkids/servlet/PageServlet?LanguageCountry=en_US&PageId=1230
- Perez LM, Jones J, Englert DR, Sachau D (2010) Secondary traumatic stress and burnout among law enforcement investigators exposed to disturbing media images. *J Police Crim Psychol* 25:113–124
- Piazza J, Russell PS, Sousa P (2013) Moral emotions and the envisaging of mitigating circumstances of wrongdoing. *Cogn Emot* 27:707–722
- Powell MB, Garry M, Brewer N (2009) Eyewitness testimony. In: Freckelton I, Selby H (eds) *Expert evidence*. Thomson Reuters, Pyrmont
- Powell M, Cassematis P, Benson MS, Smallbone S, Wortley R (in press a) Police officers' perceptions of the challenges involved in Internet Child Exploitation investigation. Manuscript submitted for publication
- Powell M, Cassematis P, Benson MS, Smallbone S, Wortley R (in press b) Police officers' strategies for coping with the stress of Child Internet Exploitation investigation. *Traumatology*. doi:10.1177/1534765613496643
- Prichard J, Watters PA, Spiranovic C (2011) Internet subcultures and pathways to the use of child pornography. *Comput Law Secur Rev*:585–600
- Ropelato J (2007) Internet pornography statistics. Retrieved from <http://internet-filter-review.toptenreviews.com/internet-pornographystatistics.html>
- Russell PS, Giner-Sorolla R (2013) Bodily moral disgust: what it is, how it is different from anger, and why it is an unreasoned emotion. *Psychol Bull* 139:328–351
- Smallbone S, Marshall WL, Wortley R (2013) Preventing child sexual abuse: evidence, policy and practice. Routledge
- Steel CMS (2009) Child pornography in peer-to-peer networks. *Child Abuse Negl* 33:560–568
- Stevenson J (2007) Welfare considerations for supervisors managing child sexual abuse on line units (Unpublished doctoral dissertation). Middlesex University, London
- Taylor M, Holland G, Quayle E (2001) Typology of paedophile picture collections. *Police J* 74:97–107
- Tomyn AJ, Powell MB, Cassematis P, Smallbone S, Wortley R (2013) Examination of the subjective wellbeing of internet child exploitation investigators. Manuscript submitted for publication
- Violanti JM, Aron F (1995) Police stressors: variations in perception among police personnel. *J Crim Justice* 23:287–294
- Wolak J, Mitchell KJ (2009) Work exposure to child pornography in ICAC tasks forces and affiliates. Retrieved from Crimes against Children Research Center: <http://www.unh.edu/ccrc/pdf/Law%20Enforcement%20Work%20Exposure%20to%20CP.pdf>
- Wortley R, Smallbone S (2012) Internet child pornography: causes, investigation, and prevention. ABC-CLIO