

Understanding and Managing the Occupational Health Impacts on Investigators of Internet Child Exploitation

Richard Wortley
Stephen Smallbone
Martine Powell
& Peter Cassematis
2014



Understanding and Managing the Occupational Health Impacts on Investigators of Internet Child Exploitation

Richard Wortley, Stephen Smallbone,
Martine Powell & Peter Cassematis

ISBN: 9781922216380

2014



Table of Contents

Acknowledgements	i	Study 2: Interviews	41
List of Tables	ii	Method	42
List of Figures	iii	Participants	42
Executive Summary	1	Interview schedule	42
What Was Done?	2	Procedure and data coding	43
Key Findings	2	Results	43
Conclusions	3	1. Stressors	43
Implications for Practice	3	2. Coping and resilience	50
Introduction	5	3. Exposure to ICE material	58
What is the Problem?	6	Conclusions: Study 2	64
Background to the Problem	6	General Discussion	65
The extent of Internet child exploitation	6	Main Findings	66
The nature of the images	7	Implications	67
Policing the Internet	7	Recruitment and selection	67
Effects on Investigators:		Training	67
What Do We Currently Know?	7	Supervision	68
Psychological impacts	7	Employee assistance	69
Physical impacts	8	Working with external professionals	70
Social impacts	8	Technology	70
Factors Affecting Well Being	8	Workplace design and physical comfort	70
Work environment and wellbeing	8	Personal coping strategies	70
Personal characteristics and coping strategies ..	9	Strengths and Limitations of the Current Study ..	71
Aims and Structure of the Report	9	Appendix	73
Study 1: Online Questionnaire	11	Scales used in the Questionnaire	74
Method	12	References and Endnotes	93
Participants	12		
Measures	14		
Procedure	17		
Results	18		
1. ICE vs. no ICE experience	18		
2. Variations among ICE investigators	23		
3. Predictors of adjustment	26		
4. ICE-specific factors	28		
5. Longitudinal analysis	35		
Conclusions: Study 1	40		

Acknowledgements

We would like to acknowledge the assistance of the following Australian law enforcement organisations (in alphabetical order): Australian Capital Territory Policing, Australian Federal Police, New South Wales Police Force, Northern Territory Police Fire and Emergency Services, Queensland Police Service, South Australia Police, Tasmania Police, Victoria Police and Western Australia Police Service. Without their financial support, active cooperation and provision of access to participants this study could not have proceeded. In particular, we would like to thank Sergeant Cameron Craig, Psychologist, State Crime Command, Queensland Police Service, for acting as the vital link between research staff, law enforcement agencies and participants as well as providing invaluable insight into the role of an Internet child exploitation investigator.

We are grateful for the cooperation and assistance of the law enforcement officers who agreed to participate in this study, particularly those who provided longitudinal data. Finally, we would like to acknowledge the financial support of the Australian Research Council.

Research Personnel

Professor Richard Wortley PhD	Chief Investigator
Professor Stephen Smallbone PhD	Chief Investigator
Professor Martine Powell PhD	Chief Investigator
Peter Cassematis PhD	Research Fellow
Mairi Benson BSc (Hons)	Research Assistant
Rita Cauchi PhD	Research Assistant
Samuel Kilby M.For.Psych	Research Assistant
Prudence Strain B.Psych., B. Crim Justice	Research Assistant

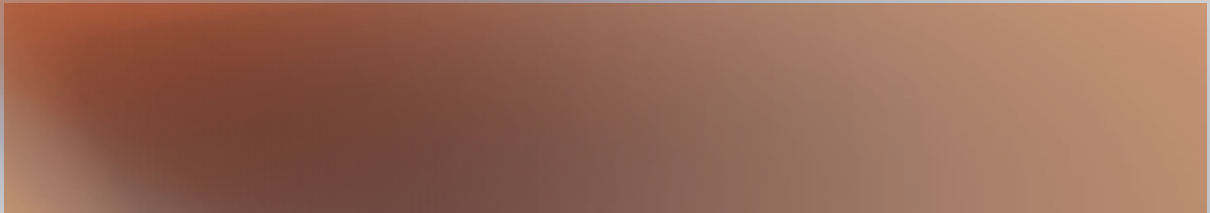
List of Tables

Table 1	13	Table 11	30
Demographic information for participants completing the questionnaire		Descriptive statistics for average ICE material exposure and other categories of material	
Table 2	14	Table 12	31
Summary of measures used in the study		Descriptive statistics for personal and organisational practices and processes experienced or used by ICE investigators	
Table 3	18	Table 13	32
Demographic information for current ICE investigators and those without ICE investigation experience		Descriptive statistics for ICE investigators agreement with strategies organisations could implement in order to protect investigator wellbeing	
Table 4	19	Table 14	33
Mean scores on job-related characteristics measures for current ICE investigators and those without ICE investigation experience		Ratings for how disturbing investigators find various types of ICE material	
Table 5	22	Table 15	34
Mean scores on psychological, social and physical measures for current ICE investigators and those without ICE investigation experience		Descriptive statistics for traits possessed by people best able to cope with exposure to ICE material	
Table 6	24	Table 16	35
Demographic information for ICE investigator groups		Mean scores on measures of job-related characteristics across time periods by current role category	
Table 7	25	Table 17	36
Mean scores on job-related characteristics across ICE investigator groups		Mean scores on measures of psychological, social and physical measures across time periods by current role category	
Table 8	25	Table 18	38
Mean scores on psychological, social and physical measures across ICE investigator groups		Changes in depression, anxiety and stress clinical categories between T1 and T2 for current investigators	
Table 9	27		
Correlations between predictor and outcome variables			
Table 10	29		
Percentage of ICE investigators who perform task as a part of their work role			

List of Figures

Figure 1	20
Rates of availability and access of organisational support across ICE and no ICE experience groups	
Figure 2	21
Reported helpfulness of psychological supports across ICE investigator and no ICE experience groups	
Figure 3	23
Clinical ranges of depression, anxiety and stress scales (from DASS-21) for ICE and no ICE experience groups	
Figure 4	37
Change in depression scale scores between T1 and T2 for each role category	
Figure 5	37
Change in anxiety scale scores between T1 and T2 for each role category	
Figure 6	38
Change in stress scale scores between T1 and T2 for each role category	
Figure 7	39
Change in post traumatic stress scores between T1 and T2 for each role category	

Executive Summary



Executive Summary

What Was Done?

- An empirical research project was carried out involving Internet child exploitation (ICE) investigators from all nine Australian police jurisdictions.
- The aim of the research was to examine the physical, social and psychological impacts of ICE investigation in order to inform the development of prevention and best practice guidelines.
- The research comprised two studies. The first study involved an online survey of 188 current, former and incoming ICE investigators and a comparison sample of 106 non-ICE police. The survey comprised a wide-ranging set of existing scales and items written specifically for this study.
- The second study involved a sub-sample of 32 current and former ICE investigators who agreed to take part in a semi-structured, anonymous telephone interview.

Key Findings

- In absolute terms, the participants in the survey were generally free from psychological, social or physical problems that may be attributed to their potentially traumatising work roles. There was, however, a small number of ICE investigators who returned clinically significant profiles for post-traumatic stress.
- In comparative terms, there were few differences in reported levels of work-related stress between ICE investigators and non-ICE police; between current ICE investigators, incoming ICE investigators and former ICE investigators; between novice and experienced ICE investigators; or longitudinally.
- In terms of variations among current ICE investigators, demographic factors – investigator gender, age and family status – were poor predictors of adjustment. Investigators who were the most resilient also tended to enjoy and to be committed to their work, and to identify with and have pride in their work unit. Investigators who reflected on and shared their thoughts and feelings about their work with colleagues, and who received support from family and friends, also tended to suffer fewer ill effects than did other investigators.

- Most ICE investigators did not identify exposure to ICE material as a particular source of work stress. Rather, their concerns were similar to those that might be found in other areas of policing, and indeed in the work place generally - relationships with colleagues and external bodies, work load and the provision of adequate resources, and the physical work environment.
- Participants described the ideal ICE investigator as being technologically savvy, having the ability to emotionally disengage from the work, being psychologically stable, possessing personal and professional integrity, as well as a sense of humour.
- Most participants reported that informal debriefing with peers and the use of dark humour were important coping strategies. However, reservations were expressed about the effectiveness of some formal organisational strategies such as the use of organisation-appointed psychologists, official debriefing with supervisors and managers, and mandatory limitations on tenure as an ICE investigator.
- While ICE investigators acknowledged the disturbing nature of their work, most believed that they were not suffering any long term effects as a result of their exposure. However, a small number of participants reported adverse effects including feelings of helplessness, intrusive thoughts and imagery, sleeplessness, reduced libido, distrust of others, and discomfort around children.

Conclusions

- Despite the disturbing nature of their role, most ICE investigators are coping well.
- To the extent that investigators find their role to be stressful, some of the causes of this stress relate to generic workplace issues.
- To the extent that exposure to ICE contributes to workplace stress, the effects do not seem to be accumulative, that is, they are not a function of the extent of exposure to ICE material.
- There is, however, no universal ICE investigator experience. In particular, there is a small number of investigators who experience clinically-significant adverse reactions to their exposure to ICE material.

Implications for Practice

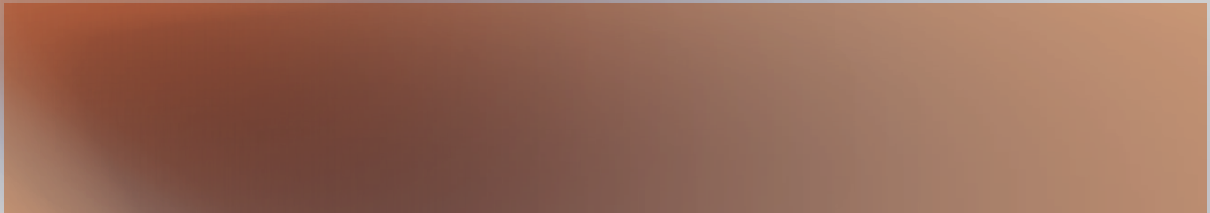
- **Recruitment and selection:** Individuals vary in their adaptability to the ICE role and care should be taken to select the right people. Desirable characteristics include: the ability to separate work from home; emotional stability; capacity to maintain professional detachment without losing empathy; a realistic idea of job requirements; and psychological mindedness.
- **Training:** The current reliance on on-the-job training increases the workload of experienced investigators. Provision of formal ICE-specific training to all would help minimise the role overload experienced by on-the-job trainers, as well as enhancing work performance and improving the coping skills of new investigators. Content areas worth considering within a training program include: coping skills; recognition of signs of distress in colleagues; how to provide peer assistance; how to access help; how to conduct Internet based investigations; proper management of electronic evidence; likely impacts of investigating ICE material; legal considerations; and how to use relevant software.
- **Supervision:** The characteristics of a good supervisor include the ability to: provide a foundation for mutual trust; provide administrative assistance necessary to allow investigators to concentrate on conducting investigation as effectively as possible; lessen the amount of role overload; allow autonomous working; and provide case related feedback. While supervisors need not have been ICE investigators, those who understand ICE investigation were perceived as better able to fairly allocate workload between investigators, value ICE investigation more highly, and capable of providing useful operational and social support.
- **Employee assistance:** Current formal employee assistance programmes - such as team-building exercises, debriefs with a team leader, and individual consultations with an organisation-appointed psychologist - are often viewed by employees with mistrust. The lack of trust seems to be related to concerns about confidentiality and the professional competence of employee assistance personnel. Strategies to reduce the level of ambivalence and mistrust towards employee assistance programmes may include: the provision of training to those mandated to provide employee assistance so that they better understand the ICE investigation role; the introduction of formal peer assistance programs;

and allowing investigators to supplement mandatory support processes with their preferred type of assistance.

- **Working with external professionals:** Working across domestic and international jurisdictions and with representatives of the judicial system is associated with time delays, misunderstandings, conflicts and frustrations. Senior management have scope to reduce the strains caused by working with external professionals. Internally, senior management need to introduce concrete guidelines for investigators to follow when interacting with various external stakeholder groups. This may require senior management to negotiate with external agencies on behalf of ICE investigators before producing internal guidelines.
- **Technology:** Technological limitations contributed to reduced employee wellbeing and investigative efficiency. While it is beyond the expertise of the researchers to make specific technological recommendations, organisations should examine the technical limitations that are most relevant to their operations and take the necessary steps to reduce these limitations.
- **Workplace design and physical comfort:** Investigators complained about the poor design and lack of comfort typical of their current workspaces. Common complaints included: open planned designs; poor ventilation; excessive ambient heat emanating from the computers; cramped overcrowded workspaces; insufficient natural light; and furniture that was not ergonomically suitable for long hours of sitting. Correcting these deficiencies would require redesigning workspaces. Where possible office spaces should be designed to allow natural light, more space between workstations, either building sound proofed mixed purpose investigation/meeting spaces or the use of moveable screens to address privacy and noise issues, using adjustable furniture and providing ergonomics training.
- **Personal coping strategies:** Investigators should be encouraged to avail themselves of potential sources of informal social support. Effective personal coping strategies included: receiving support from family and non-work friends; sharing advice and workload with colleagues; engaging in 'gallows humour' with colleagues; focusing on the inherent societal value of

the work achieved through successful prosecution; breaking up the work routine by switching between ICE-related and non-ICE-related tasks; concentrating on the procedural and analytical aspects of the job; and remaining aware of activity occurring in the general workplace.

Introduction



Introduction

What is the Problem?

To help combat Internet child exploitation (ICE), specialist law-enforcement investigators are required to view thousands of sexually graphic and often violent images involving children as part of their daily work. The nature of these images has raised serious concerns among police organisations about possible harmful occupational health effects on investigators. While all aspects of police work can be stressful, direct exposure to graphic sexual content poses a significant health risk that is different in nature to other types of stressors. However, there is to date a lack of research that has specifically examined occupational health impacts on ICE investigators and this gap seriously impedes the capacity of police organisations to discharge a duty of care over their personnel. These impacts may not just have harmful personal consequences for individual investigators, but may also have serious productivity implications for police forces that impede them in their mission of preventing ICE.

Background to the Problem

The potential occupational health threats faced by ICE investigators must be understood in the context of the nature of their work. Here we briefly outline the size of the ICE problem, the nature of the images that ICE investigators encounter, and the ways in which ICE investigators encounter abuse images in their daily work.

The extent of Internet child exploitation

The Internet has transformed the nature and scale of the problem of sexual abuse images involving children. Prior to the Internet, all such material was produced, distributed and viewed in hard copy (and typically poor quality) form, and law enforcement agencies could justifiably claim considerable success in curbing its proliferation¹. The Internet has provided an unparalleled distribution network that allows images to move across borders and directly into the homes of users, while associated digital technologies permit the production of cheap, 'high quality' home-made images that do not deteriorate and that can be conveniently catalogued and stored.

It is difficult to know precisely just how big the child sexual abuse image problem is, but there is no doubt that it has increased dramatically since the advent of the Internet (formally founded in 1983). In 1980 it was reckoned that the largest-selling child pornography magazine in the US sold to around 800 customers and grossed \$30,000 per year²; twenty years later, one Internet company (Landslide Productions) providing child abuse images was found to have 390,000 subscribers from 60 countries and a turnover in excess of \$1.4 million per month³. It has been calculated that 1 in 500 queries on Peer 2 Peer (P2P) networks involves searches for child sexual abuse images⁴, and individual offenders have been caught with in excess of a million images in their possession⁵. It seems safe to guess that the number of active offenders accessing child abuse images from the Internet can be counted in the millions⁶.

The nature of the images

Child sexual abuse images vary in severity, ranging from non-sexualised pictures of children collected from legitimate sources such as magazines, to graphic depictions of children engaging in sexual acts with other children, adults and even animals. The most common method of grading abuse images is with the COPINE scale, which sets out 10 levels in ascending order of severity: indicative; nudist; erotica; posing; erotic posing; explicit erotic posing; explicit sexual activity; assault; gross assault; and sadistic/bestiality⁷.

There is some evidence that the severity of ICE material is increasing. In images examined recently by the UK's Internet Watch Foundation, 73% of victims were assessed as being under 10 years of age. Around two-thirds of the images involved penetrative sexual activity between the victim and an adult, equivalent to levels 9-10 on the COPINE Scale⁸.

Policing the Internet

Policing child sexual abuse images on the Internet presents unique challenges for law enforcement agencies⁹. Most major police forces around the world have dedicated units devoted to investigating and countering Internet child exploitation. In the course of their work, ICE investigators will routinely encounter child sexual abuse images in three main ways.

First, investigators may undertake scanning of the Internet to locate and remove illegal ICE material, close sites, track offenders who visit those sites, and identify perpetrators and victims portrayed in the images. Investigators may search for sites directly, or they may act on information received about illegal sites from the public

or a monitoring body. Depending on an assessment of the images and where they are stored, the investigator may issue a takedown order to the relevant ISP, or, in cases where the server is located in an area outside of their jurisdiction, liaise with other relevant agencies.

Second, investigators may be exposed to ICE material in the course of undercover work infiltrating offender online networks. This may entail possessing and sharing enough ICE material and communicating in a manner that is convincing to offenders in order to gain acceptance in the network¹⁰. Investigations may also require posing as a likely victim and being subjected to the advances of an offender until sufficient evidence for prosecution is collected¹¹. Taking on a false identity and interacting with offenders in these ways may entail additional occupational stresses over and above viewing abuse images.

Third, investigators may need to assess images for the purposes of evidence gathering and prosecution. This will typically involve the forensic examination of seized computers and hard drives. As noted earlier, collections may exceed a million images. Identifying, assessing, linking and cataloguing these images is a time-consuming and potentially traumatic task for law enforcement officers. While image-hashing technology (i.e., assigning each image a unique digital identifier) is increasingly being used to aid in these tasks, exposure to ICE material at this stage remains unavoidable.

Effects on Investigators: What Do We Currently Know?

The graphic and disturbing nature of ICE material, as well as the frequency and intensity of investigators' exposure, naturally raises concerns about the effects of this type of work above and beyond other law enforcement duties. Unfortunately, the impact of ICE investigation on investigator wellbeing is currently under-researched and poorly understood¹². Here we review the limited evidence concerning the psychological, physical and social impacts of ICE investigation.

Psychological impacts

The prevalence and severity of psychological impacts within the ICE investigator population cannot, as yet, be estimated with any certainty¹³. Some research, however, has identified a number of adverse consequences that may be associated with ICE exposure. Short-term reactions reported by incoming investigators have included repulsion and distress to ICE material, however,

these feelings tended to dissipate after a desensitisation period between several weeks to a few months¹⁴. In the longer term, some ICE investigators have suffered depression, intrusive imagery, hypervigilance (with regards to child safety), nightmares, moodiness, and avoiding discussion of work¹⁵. One study¹⁶ reported that over a third of the ICE investigators examined presented with symptoms consistent with Secondary Traumatic Stress Disorder (STSD; i.e., stress associated with dealing with victims of trauma). There is some evidence that negative psychological impacts increase with the time spent in the ICE investigation role¹⁷ and the number and severity of images/videos encountered¹⁸.

On the other hand, there is also some evidence that the experience of successfully managing distress can foster resilience and positive psychological outcomes, if the trauma is processed and incorporated into a new philosophy (a process referred to as post-traumatic growth¹⁹). Qualitative studies with ICE investigators have reported some positive outcomes from ICE investigation, such as greater appreciation of family, increased compassion for children, and feeling that they were doing significant and important work²⁰. As one ICE investigator told researchers: "You might not feel good about what you are seeing, but you feel good about what you are doing. You know that you are doing something important"²¹.

Given the sexual nature of the material encountered in ICE investigation, the question of whether repeated exposure to ICE material can affect workers' sexual relationships and functioning must be considered. A number of studies have reported that ICE investigators have experienced deterioration in their sexual relationships and a loss of sexual desire as a result of their work²². Furthermore, given that the majority of offender collections contain a mixture of legal pornography and ICE material, it is possible that some investigators may experience conditioned arousal to ICE material. No studies on ICE investigators have reported self-reported arousal to ICE material, although in one study²³ a participant reported concern about another investigator's inappropriate attraction to ICE material. The limited information available about this matter prompts the need for further investigation.

Physical impacts

Physical problems reported by ICE investigators have included headaches, upset stomachs, severe tiredness, sleep deprivation and weight gain²⁴. It has suggested that ICE investigators also display other adverse physical reactions common to police officers such as depressed

immunity, elevated heart rate and general ill health²⁵. However, to date, there is an absence of quantifiable evidence that indicates physical ailments experienced by ICE investigators are significantly different than any other stressful or demanding occupation.

Social impacts

Qualitative research has revealed ICE investigators attribute a number of social problems to ICE exposure. These include psychological discomfort around children manifesting in a reluctance to physically interact with children (including performing routine parenting tasks), withdrawal from social activities with family, friends or potential partners, generalisation of the negative opinion of the mostly male offenders to all males, isolation from other law enforcement personnel and difficulty being emotionally and physically intimate within domestic relationships²⁶. However, no significant relationship has been found between the extent of exposure to ICE material and social factors such as quality of peer and family relationships, or distrust of the general public²⁷.

Factors Affecting Well Being

In this section we consider how the impacts of ICE material on investigators may be moderated by the organisational context in which the work takes place and the individual characteristics of investigators that may confer vulnerability or resilience to the work they undertake. An examination of these factors offers guidance on how work practices may be designed, and staff selection and management practices may be implemented, to better manage the negative impacts of ICE material.

Work environment and wellbeing

Research conducted within law enforcement generally has illustrated that factors associated with organisational climate (e.g., co-worker relations, availability of resources, supportive leadership, bureaucracy) were more likely to affect police officer wellbeing, stress levels and performance than operational experiences²⁸. Studies specifically examining workplace factors for ICE investigation have found similar results. Some ICE investigators have reported workplace stressors (unrelated to ICE exposure) to be more stressful than viewing ICE material²⁹. For example, a focus group participant in one study was quoted as saying; "The material we work with has never driven me over the deep end, but the bureaucratic and technical frustrations of

the job have!”³⁰. High workload has also been identified as a problem by ICE investigators, in some cases close to or as stressful as viewing ICE material³¹. Inadequate technical support, obsolete hardware, unreliable software, general resource insufficiency, inadequate training, unsupportive supervisors and ambivalence expressed towards ICE investigation (e.g., not being viewed as “real” police work, aspersions about the investigators’ motivations for working in ICE units, etc.) have been mentioned as other sources of frustration in a number of the reviewed studies³². Alternatively, organisations allowing flexible work practices were identified as being favourable by investigators³³.

Personal characteristics and coping strategies

Research (largely qualitative) has identified a number of personal characteristics that may be implicated in the wellbeing of ICE investigators. The personal qualities suggested to be associated with ICE investigator resilience include psychological stability, openness to discussing sexual topics, capacity to acquire a desensitised view of the material, empathy (for the victims), being able to recognise signs of distress in themselves and colleagues, an open minded attitude towards sex and the capacity to prevent pressures from work intruding into the home³⁴. On the other hand, characteristics suggested as being associated with lower resilience include becoming a parent, having children similar to victims, experiencing adverse life events, having pre-existing psychological conditions and limited access to social support³⁵.

Additionally, some literature has indicated that intrinsically motivated volunteers may be less susceptible to harm than involuntarily assigned or extrinsically motivated volunteers³⁶. For instance, involuntary ICE investigators may not have the option to screen themselves out of such an assignment, should they be unsuitable or susceptible to distress. Furthermore, investigators who volunteer on the basis of extrinsic rewards (e.g., promotion, pay increase) may be unwilling to leave their role to avoid losing their rewards, and thereby persist through any occupational injury to their own detriment. Some intrinsic motivations, however, have been associated with lower resilience. For example, an investigator who has experienced childhood sexual abuse may have intrinsic motivation to protect others from abuse but may have lower resilience to the impacts of their work compared to those without a history of abuse³⁷. Additionally, some “mission-driven” investigators

may be extremely reluctant to be relieved of duties (or to otherwise take a break), perceiving any leave taking to be akin to desertion of either victims or colleagues³⁸.

The adverse impacts of ICE investigation may also be ameliorated through a range of individual and organisation level strategies. Coping strategies reportedly used by individual investigators include: seeking informal social support (mostly from fellow ICE investigators) particularly in the form of ‘gallows’ humour; religion; separating work from home; being aware of personal limits; focusing on the importance of the work; self-care regimes; and attending mandatory psychological assessments³⁹. Strategies specifically designed to manage the material viewing process include: pre-exposure mental preparation; desensitisation; dissociation (shutting down emotions, not looking at victims’ eyes, pretending the children weren’t real); taking breaks; and controlling the viewing situation (when, where and for how long)⁴⁰. Organisational strategies that may minimise harm to ICE investigators include: screening potential investigators for motive and possible individual level vulnerabilities and abilities; allowing flexible work practices; pre-employment exposure to ICE material; and providing access to counselling⁴¹. However, while the above strategies were believed by respondents to be effective, few have been subjected to empirical validation.

Aims and Structure of the Report

In summary, the influence of ICE investigation on investigator wellbeing is under-researched. There is evidence that some investigators report psychological, physical and social problems but further investigation is required to understand the relationship between ICE investigation and its potential impacts. It may also be possible that investigating ICE material is not the sole, or even primary, reason for any decrease in wellbeing. The work environment is likely to contain stressors (including those found in many workplaces) that may affect worker wellbeing, and an individual investigator may also possess pre-existing individual characteristics that increase or decrease vulnerability to harm. While various individual and organisationally provided coping resources have been identified, the efficacy of these strategies has not been established.

The current research project was undertaken with the broad aims of increasing understanding of the impact ICE investigation can have on investigators and informing the development of work processes that protect the wellbeing of ICE of investigators. More specifically, the current research was intended to:

- Examine the physical, social and psychological impact of ICE investigation;
- Examine the role the work environment may have in either limiting or exacerbating problematic occupational health impacts;
- Examine the role that personal characteristics and coping strategies (personal and organisational) may have in either limiting or exacerbating occupational health impacts; and,
- Develop prevention models that will guide best practice standards for the selection, training, management, ongoing monitoring, and reintegration of ICE investigators.

Data were collected via quantitative and qualitative methods in order to maximise the scope of information obtained and capitalise on the complementary strengths of both techniques. The mixed methods approach allowed the current researchers to obtain objective measures of research variables and test relationships between factors using statistical analyses, as well as acquire participants' subjective contextualised interpretations. We present the research in two separate studies. The first involves quantitative data collected from participants by an online questionnaire; the second involves qualitative data collected by telephone interviews.

Study 1: Online Questionnaire

Study 1: Online Questionnaire

Method

Participants

Participants were current employees drawn from all nine Australian law enforcement organisations (Australian Capital Territory Policing, Australian Federal Police, New South Wales Police Force, Northern Territory Police Fire and Emergency Services, Queensland Police Service, South Australia Police, Tasmania Police, Victoria Police and Western Australia Police Service). Initially, a total of 475 potential participants logged onto the project's questionnaire on the Qualtrics website. Of this number, 144 cases were removed from the dataset due to either not commencing or completing the questionnaire, or being duplicate entries⁴² thereby resulting in a total sample of 294 participants. The sample included ICE investigators (n = 188) at various stages of engagement (current experienced, current inexperienced, incoming and former) and a comparison group of officers with

no ICE experience (n = 106). Non-ICE participants included officers engaged in especially stressful areas of policing such as homicide investigation, forensic crash examination and investigation of outlaw motorcycle gangs. Thirty-seven participants (30 ICE and 7 non-ICE) filled in the questionnaire on a second occasion (Time 2), on average 10.5 months (range: 9 to 13 months) after the initial data collection (Time 1), thereby providing a small retest, longitudinal sample.

Demographic information was collected on participants' age, gender, rank, tenure with current organisation, law enforcement and current role, formal education level, current family structure, child/ren gender and age, and work role category at the time of completing the questionnaire. A breakdown of the sample in terms of these variables is shown in Table 1.

Table 1 Demographic information for participants completing the questionnaire

Demographic variables		Time 1 n = 294	Time 2 n = 37
Gender	Male	182 (61.9%)	23 (62.2%)
	Female	111 (37.8%)	14 (37.8%)
	Not stated	1 (0.3%)	0 (0.0%)
Age	Mean [years]	39.40	39.43 (T1) 40.35 (T2)
	Range [years]	21 - 68	25 - 54 (T1) 26 - 56 (T2)
Current role	Current ICE investigator > 6 months	126 (42.9%)	24 (64.9%)
	Current ICE investigators < 6 months	15 (5.1%)	0 (0%)
	Incoming ICE investigators	8 (2.7%)	0 (0%)
	Former ICE investigators	39 (13.3%)	6 (16.2%)
	No ICE experience	106 (36.1%)	7 (18.9%)
Jurisdiction	New South Wales	39 (13.3%)	0 (0%)
	Australian Capital Territory	15 (5.1%)	1 (2.7%)
	Victoria	65 (22.1%)	9 (24.3%)
	Queensland	60 (20.4%)	12 (32.4%)
	Western Australia	38 (12.9%)	2 (5.4%)
	Northern Territory	16 (5.4%)	0 (0%)
	South Australia	6 (2.0%)	0 (0%)
	Tasmania	5 (1.7%)	0 (0%)
	Australian Federal Police	49 (16.7%)	13 (35.1%)
	Not stated	1 (0.3%)	0 (0%)
Organisational Tenure	Mean [years]	13.38	14.29
	Range [years]	1 - 48	2 - 38
Law enforcement Tenure	Mean [years]	14.30	15.50
	Range [years]	0 - 48	2 - 38
Current role Tenure	Mean [years]	4.37	4.81
	Range [years]	0 - 35	0 - 32
Highest level Qualification	University level	166 (56.5%)	23 (62.2%)
	Trade/Certificate level	63 (21.4%)	5 (13.5%)
	High school	50 (17.0%)	8 (21.6%)
	Did not complete high school	15 (5.1%)	1 (2.7%)
Rank	Unsworn employee	29 (9.9%)	4 (10.8%)
	Constable	50 (17.1%)	6 (16.2%)
	Senior Constable	135 (46.1%)	20 (54.1%)
	Sergeant	60 (20.5%)	4 (10.8%)
	Senior Sergeant	12 (4.1%)	2 (5.4%)
	Inspector or above	7 (2.4%)	1 (2.7%)
Organisational Tenure	Mean [years]	13.38	14.29
	Range [years]	1 - 48	2 - 38
Law enforcement Tenure	Mean [years]	14.30	15.50
	Range [years]	0 - 48	2 - 38
Current role Tenure	Mean [years]	4.37	4.81
	Range [years]	0 - 35	0 - 32
Highest level Qualification	University level	166 (56.5%)	23 (62.2%)
	Trade/Certificate level	63 (21.4%)	5 (13.5%)
	High school	50 (17.0%)	8 (21.6%)
	Did not complete high school	15 (5.1%)	1 (2.7%)
Marital status	Single	52 (17.7%)	3 (8.1%)
	Life partner	49 (16.7%)	6 (16.2%)
	Married	193 (65.6%)	28 (75.7%)
Parental status	Have children	175 (59.5%)	20 (54.1%)
	Have no children	119 (40.5%)	17 (45.9%)
Age of child/ren	Mean [years]	10.92	10.09
	Range [years]	1 - 37	2 - 26

Measures

A questionnaire was developed that included existing scales and items written specifically for this study. In addition to demography (see Participants), questions covered job-related, psychological, social and physical factors associated with police investigation. The questionnaire was split into two sections: the first section examined issues related to policing in general and was answered by all participants; the second section focussed on issues specific to ICE investigation and was answered just by the ICE sample. The various scales used in the study are listed in Table 2 (showing the order that they appeared on the Qualtrics site) and described below. Copies of the scales are provided in the Appendix.

Job satisfaction: This was measured with the three-item measure of global job satisfaction sub-scale from the Michigan Organisational Assessment Questionnaire⁴³. Participants respond to the items using a five-point rating scale (1 = strongly disagree to 5 = strongly agree).

Role overload: Role overload refers to an individual's lack of personal resources required to fulfil work commitments and was measured with a five-item scale⁴⁴. This measure used a five-point rating scale (1 = strongly disagree to 5 = strongly agree).

Pride in the work unit: This was measured using five items adapted from a nine-item scale⁴⁵ measuring pride in the organisation. Four items were removed that referred to organisational fit rather than pride, and the wording was changed to refer to the work unit rather than organisation.

Table 2 Summary of measures used in the study

Sample	Domain	Measures	Order
All participants	Job-related	Job satisfaction	5
		Role overload	6
		Pride in work unit	7
		Social identification	8
		Respect from other units	9
		Realistic job preview	10
		Organisational support	11
		Work engagement	15
	Psychological	Quality of life	1
		General mood	2
		Psychological mindedness	3
		Self sacrifice	4
		Post-traumatic growth	13
		Post-traumatic stress	14
		Depression, anxiety and stress	16
		Burnout	17
	Social	Interpersonal relationships	12
	Physical	Psychosomatic complaints	18
ICE participants only	Job-related	ICE investigator task checklist	19
		Average ICE exposure	20
		Work practices and processes	22
		Organisational strategies	23
		Job rotation	25
	Psychological	ICE material 'disturbingness'	21
		Characteristics associated with coping	24

The scale used a six-point rating scale (1 = strongly disagree to 6 = strongly agree).

Social identification: Social identification is an indicator of how important membership in a work group is for the individual's self-concept. Two levels of identification were examined: **social identification with the workgroup** and **social identification with the organisation**. They were measured using a three-item scale⁴⁶ presented twice with the terms 'workgroup' or 'organisation' inserted into items as appropriate (and thus there were six items in total). They were measured using a six-point rating scale (1 = strongly disagree to 6 = strongly agree).

Respect from other units: This construct was measured using a seven-item scale measuring respect from others in the work setting. The items were modified to replace the word 'you' with 'I' (e.g., "Respect the work you do" became "Respect the work I do") and an item asking if the participants' ideas were respected was replaced with an item asking if their work-related ideas were respected⁴⁷. Responses were measured using a six-point rating scale (1 = strongly disagree to 6 = strongly agree).

Realistic job preview: This scale was written specifically for this study to measure the accuracy and sufficiency of information received prior to joining the work unit. The scale comprised twelve items. There were five items about the information provided about the role prior to commencement, and these items were presented twice; once questioning the participant about the accuracy of the information, and once in relation to whether a sufficient amount of information was provided (for example, "I received accurate information about what the job actually required me to do" and "I received a sufficient amount of information about what the job actually required me to do"). Two additional items asked whether participants felt they generally knew what to expect or whether they felt misled (for example, "Overall I knew what to expect before I started in this role"). Subsequent analyses indicated that the scale measured two factors – **job requirements** and **job attractiveness** – and both factors possessed high internal consistency⁴⁸. Items were rated on a five-point rating scale (1 = strongly disagree to 5 = strongly agree).

Organisational support: This was measured by three sets of eight items that were developed specifically for this study. Each of the eight items represented a specific form of psychological support (e.g., pre-employment psychological screening, informal debriefing with co-workers, regular job rotations). The first item set asked whether a specific type of support was **available** to the participant. The second set asked whether the participant had **accessed** a specific form of support. The third set

asked for the participant's perception about how **helpful** they found a specific type of support. All items were answered on a six-point rating scale (0 = not available/never accessed to 5 = very helpful).

Work engagement: This was measured using the 17-item Utrecht Work Engagement Scale⁴⁹, comprising three subscales measuring **vigour**, **dedication** and **absorption**. The measure uses a seven-point rating scale (0 = never to 6 = always).

Quality of life: This construct comprised two dimensions. **Personal wellbeing** was measured with the Personal Wellbeing Index – Adult (PWI-A)⁵⁰. The PWI-A measures subjective wellbeing using eight items, each of which refers to a different aspect of **general life satisfaction** (standard of living, personal health, achieving in life, personal relationships, personal safety, feeling part of your community, future security, and spirituality or religion). An additional single item was used to measure general life satisfaction: "Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole". It was previously used in the construct validation of the PWI-A and as a measure of subjective wellbeing in its own right⁵¹. As per the recommendation in the PWI-A manual, this item was asked before the personal wellbeing. All items were rated on an 11-point rating scale (0 = completely dissatisfied to 10 = completely satisfied).

General mood: This was assessed with the three-item Homeostatically Protected Mood (HPMood)⁵². The scale employs the affective descriptors 'happy', 'content' and 'alert'. Participants were asked to report their general level of each of these descriptors (for example, "How happy do you generally feel?"), which were scored on an 11-point rating scale (0 = not at all to 10 = extremely).

Psychological mindedness: This construct refers to an individual's "...interest in and ability to reflect on thoughts and behaviour in an integrated manner... [and] includes the person's interest in expanding self-awareness through such a process of reflection"⁵³. In the current research two subscales (11 items) identified in previous research⁵⁴ were used to measure **belief in the benefits of discussing one's problems** and **access to feelings**. Both sub-scales were scored on a five-point rating scale (1 = strongly disagree to 5 = strongly agree).

Self-sacrifice: Self-sacrifice is the willingness of people to incur personal loss in the service of the greater public good. It was measured with an eight-item subscale identified by confirmatory factor analysis of the Public Service Motivation scale⁵⁵. These items were measured using a five-point rating scale (1 = strongly disagree to 5 = strongly agree).

Post-traumatic growth: This was measured with the 21-item Posttraumatic Growth Inventory (PTGI)⁵⁶. The PTGI has five sub-scales measuring different gains that may be realised after exposure to traumatic experiences. These are **relating to others, new possibilities, personal strength, spiritual change and appreciation of life**. Participants responded to the items on a six-point rating scale (0 = not experienced to 5 = a very great degree).

Post-traumatic stress: This was measured with the PTSD Checklist - Civilian (PCL-C)⁵⁷. It is a 17-item scale used for screening, diagnosis and monitoring of PTSD using symptoms specified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). There are three subscales corresponding to PTSD symptoms: **intrusive recollection, avoidance/numbing, and hyperarousal**. Participants were asked to report how much they were bothered by a specific symptom in the previous month on a five-point rating scale (1 = not at all to 5 = extremely). A cut-off score of 44 was used to determine if the participant's responses fell within the clinically significant range (i.e., symptoms consistent with a PTSD diagnosis)⁵⁸.

Depression, anxiety and stress: These three subscales were measured by the 21-item version of the Depression Anxiety Stress Scales (DASS-21)⁵⁹. The DASS-21 asks participants to rate statements on a four-point rating scale (0 = did not apply to me at all to 3 = applied to me very much, or most of the time) relating to negative emotional states. Cut-off scores are provided by the scale developers to identify scores within normal or clinically elevated ranges.

Burnout: This was measured with the 16-item Oldenberg Burnout Inventory (OLBI)⁶⁰. The OLBI contains two subscales measuring **disengagement from work and physical, cognitive and emotional exhaustion**, which a body of research suggests represents the core dimensions of burnout⁶¹. The items on the OLBI are scored on a four-point rating scale (1 = strongly agree to 4 = strongly disagree).

Interpersonal relationships: These were measured with a modified version of the Reactions to Disturbing Media scale⁶². The scale broadly measures the nature of the individual's interpersonal relationships and social impacts of their work. It comprises 21 items forming four subscales: **supportive relationships** – the extent to which individuals felt that their loved ones were open and understanding about their work; **protectiveness** – measuring whether the individual felt an increased need to shield their loved ones from harm; **co-worker relationships** – measuring the closeness and cohesion of the individual's relationships with their co-workers; and,

distrust of general public – whether their work had made them feel more negative about people in general. There were three modifications to the existing instrument. One was the addition of the sentence stem "Since I began doing this job...". The second was the addition of a single item to the protectiveness scale, "I can become nervous when my spouse/significant other is alone with my child/ren" (making a total of 22 items). The third was the addition of a '0' (not applicable) response option as not all participants could be expected to have children, a spouse or a significant other (scoring is now 0 = not applicable, 1 = strongly disagree to 5 = strongly agree).

Psychosomatic complaints: This scale comprised 19 different physical ailments (e.g., "cramps in my legs", "becoming very tired in a short time", "hands sweating so that they feel damp and clammy")⁶³. Respondents used a four-point rating scale (1 = often to 4 = never), reversed from the original scale to reflect the direction of other rating scales in the questionnaire. However, in reporting results for this scale, to avoid confusion items were scored so that higher scores reflected higher levels of psychosomatic complaints.

ICE investigator task checklist: This scale was written specifically for this project and contained 28 tasks pertinent to ICE investigation identified by a review of relevant literature (e.g., "Role playing as child while interacting with a potential offender", "Classification of ICE material by content", "Collaboration with international ICE investigators"). Participants were free to select as many of these tasks as they personally performed.

Average ICE exposure: This was measured with a block of six individual items asking participants to report the number that best represents the following averages: hours per week viewing ICE material; average consecutive hours viewing ICE material in a single sitting; number of days per week viewing ICE material; number of ICE images viewed in a week; number of ICE images viewed in a shift; and number of ICE images viewed in a single sitting. Included in the same block of items were three questions asking participants to report the number that best represents the average percentage of material that would be considered: legal pornography; cannot be classified as illegal due to difficulty verifying the ages of those involved; and material that cannot be classified as illegal as it does not fit within the legislated definition of ICE.

Work practices and processes: These were assessed using 50 individual items written for this study that asked whether participants had ever experienced various personal or organisational practises or processes. Topics covered included personal viewing strategies, provision

of training, voluntariness of working in ICE investigation and supportiveness of organisations and supervisors. Embedded within this block of questions were seven items (randomly distributed) referring to possible concerns around investigator sexual arousal (e.g., "I could tell if one of my co-workers had begun to use ICE material for personal gratification", "I sometimes have unwanted, intrusive sexual fantasies similar to ICE material.") Responses were on a five-point rating scale (1 = strongly disagree to 5 = strongly agree).

Organisational strategies: Thirty-three items were written for the study to elicit opinions on possible actions organisations could take to care for investigators. Suggested strategies were drawn from previous research into factors that influence wellbeing of ICE investigators⁶⁴. Items were rated on a five-point rating scale (1 = strongly disagree to 5 = strongly agree).

Job rotation: This was measured by a single item in which participants were asked: "How many consecutive years should an investigator be exposed to ICE material before being reassigned to other duties?" Responses were coded as follows: 1 = Up to 1 year; 2 = Up to 3 years; 3 = Up to 5 years; 4 = Up to 7 years; 5 = More than 7 years.

ICE material 'disturbingness': This scale measured how disturbing respondents found various types of ICE material. It comprised 13 items written for this study derived from the COPINE descriptive typology of ICE material⁶⁵. As material is not restricted to still pictures, the items were rewritten to make sense when referring to material rather than still imagery (e.g., the words "picture" or "photograph" were replaced with "material"). Item order was randomised (the original typology was arranged linearly in order of increasingly serious victimisation) to lessen the likelihood of a participant responses being biased by an obvious progressive increase in offense seriousness between items. Three items were added to ascertain whether the format of the material (e.g., text, video/audio, streaming video) influenced perceived disturbingness. A six-point Likert scale (0 = never encountered, 1 = not disturbing at all to 5 = extremely disturbing) was used to indicate the amount of perceived material disturbingness.

Characteristics associated with coping: These were gathered through 19 individual items based on a five-point rating scale (1 = strongly disagree to 5 = strongly agree) written specifically for this research. The items referred to personal characteristics such as investigator gender, personal history of sexual abuse, existing level of wellbeing, stable personal life, victim empathy, and belief

that protecting children makes ICE investigation worth any discomfort an investigator might feel.

Procedure

There were two distinct data collection periods. The main data collection period (Time 1) was between November 2011 and March 2012; the retest data collection period (Time 2) was between November 2012 and December 2012. The procedure described below was followed for both data collection periods. Potential participants were made aware of the project and how they could voluntarily participate via each organisation's internal email system.

The main stakeholder liaison person approached managers of personnel in each of the police agencies asking that information about the project be forwarded to relevant staff. Potential participants were made aware of the project and how they could voluntarily participate via each organisation's internal email system. Those staff interested in participating followed a web link embedded in the internal email to the questionnaire, which was housed on the secure Qualtrics online research website. All raw data were collected and stored on the password-protected Qualtrics server. Raw data could only be viewed by the one member of the research team who knew the correct passwords to access the data stored on the Qualtrics server. Raw data were exported from Qualtrics to SPSS for analysis. Qualtrics conditional branch logic facility was used to ensure participants without ICE investigation experience only had access to questions intended to be answered by the entire sample. Participants with ICE investigation experience were able to view all questions.

The questionnaire was prefaced with an introductory section. Participants were informed of the purpose for the research, stressing that participation was strictly voluntary, that they did not have to answer any question they did not wish, and could withdraw their participation at any time without penalty. They were assured that no one outside of the research team would see raw data and that all results would be reported at an aggregate level (i.e., there was no way for an individual employee's responses to be connected to the participant by members of their organisation). Participants were explicitly told not to provide their name at any time. For example, participants were told that filling in the questionnaire would be taken as indicating they were giving informed consent to participate rather than asking for a signed statement. This was to prevent any member of the research team from being able to identify individual participants. Participants were

informed that they may be asked to fill out the questionnaire at a later date in order to examine whether participant responses change over time. Any request for participation in a second round of data gathering would only come through their organisation's internal email system.

Participants were asked to supply an individual personal identification code, following a formula specified by the research team. The personal identification code was used to prevent identification of individual participants while facilitating the matching of data between data collection rounds.

Results

The results are presented in five sections: 1) comparison of ICE investigators with non-ICE investigators; 2) comparisons among sub-groups of current, former and prospective ICE investigators; 3) an examination of the relationship between predictor and outcome variables for current ICE investigators; 4) examination of factors specific to current and former ICE investigators, and; 5) comparisons between Time 1 and Time 2 for participants who answered the questionnaire on two occasions.

1. ICE vs. no ICE experience

Current ICE investigators (n = 141) were contrasted with employees of law enforcement agencies who had no experience with ICE investigation (n = 106). Differences in group means were tested for statistical significance using univariate analysis of variance (ANOVA). For the sake of readability, statistical results will simply be reported in terms of the level of significance.

Demographic factors

Demographic comparisons between these two groups are presented in Table 3. In the current sample, ICE investigators and those without ICE investigation experience were comparable across demographic characteristics such as gender, age, marital status and whether or not they were parents. The only significant difference between the groups was that ICE investigators were found to have a shorter average tenure in their current work role than the no ICE experience group (less than half the duration).

The ICE and non-ICE investigation groups were also compared across a range of factors measuring the individual's experience or perception of job-related

Table 3 Demographic information for current ICE investigators and those without ICE investigation experience

Demographic information		Current ICE investigators	No ICE experience
Gender	Male	88 (62.4%)	69 (65.1%)
	Female	52 (36.9%)	37 (34.9%)
	Not stated	1 (0.7%)	0 (0.0%)
Age	Average [years]	38.51	40.59
Current role tenure	Average [years]	3.07***	6.96***
Marital status	Single	27 (19.1%)	14 (13.2%)
	Life partner	20 (14.2%)	25 (23.6%)
	Married	94 (66.7%)	67 (63.2%)
Parental status	Have children	82 (58.2%)	64 (60.4%)
	Have no children	59 (41.8%)	42 (39.6%)

*** p<.001

characteristics, as presented in Table 4. The groups reported similar levels of job satisfaction, pride in their own work unit, perceived respect from other work units and having received a realistic preview of their job before work commencement. Mean scores indicated that, on average, participants were generally satisfied with their job, had pride in their work and felt respected by other work units, but only marginally agreed that they received realistic previews of their job prior to commencement.

The two groups reported comparable engagement with their work (mildly positive levels of engagement), as reflected by their self-reported vigour, dedication and absorption in their work role. ICE investigators reported a modest but significantly higher level of workload than participants not working in ICE investigation. Whilst the average results for the no ICE experience group suggested very slight disagreement that they experienced role overload (i.e., lacking the resources to complete work demands), the ICE investigation group tended to be more neutral about whether or not they experienced overload. ICE and non-ICE investigation groups reported similar levels of social identification with their own work groups, but conversely, ICE investigators

reported somewhat less identification with their organisation than those not working in ICE investigation.

Participants also scored the availability of various forms of organisational support in relation to their work role. Figure 1 depicts eight forms of organisational support in terms of whether or not they were available to the participant, and whether they were accessed, for both ICE and no ICE experience groups.

The most widely available and accessed forms of support across both groups were informal debriefing with work colleagues and talking to family/non-work friends, however, approximately twice as many ICE investigators than no ICE experience participants reported that the option of talking to family/non-work friends was "unavailable" to them. Regular mandatory psychological evaluations were more widely available to ICE investigators (84%) than the no ICE experience group (52%), as was psychological evaluation at the participant's request (97% vs. 85%, respectively), however, voluntary evaluations were infrequently accessed by both groups. Pre-role and regular mandatory psychological evaluations were reported to be more widely available to ICE investigators (73%) than the no ICE experience group (52%). Regular

Table 4 Mean scores on job-related characteristics measures for current ICE investigators and those without ICE investigation experience

Demographic information		Current ICE investigators	No ICE experience
Job satisfaction		4.04	4.05
Role overload		2.77*	2.50*
Pride in work unit		4.76	4.80
Social identification	With work group	4.47	4.44
	With organisation	3.92**	4.31**
Respect from other units		4.67	4.55
Realistic job preview	Job requirements	3.37	3.35
	Job attractiveness	3.38	3.35
Work engagement	Vigour	3.88	4.10
	Dedication	4.24	4.30
	Absorption	3.42	3.53

* p<.05 ** p<.01

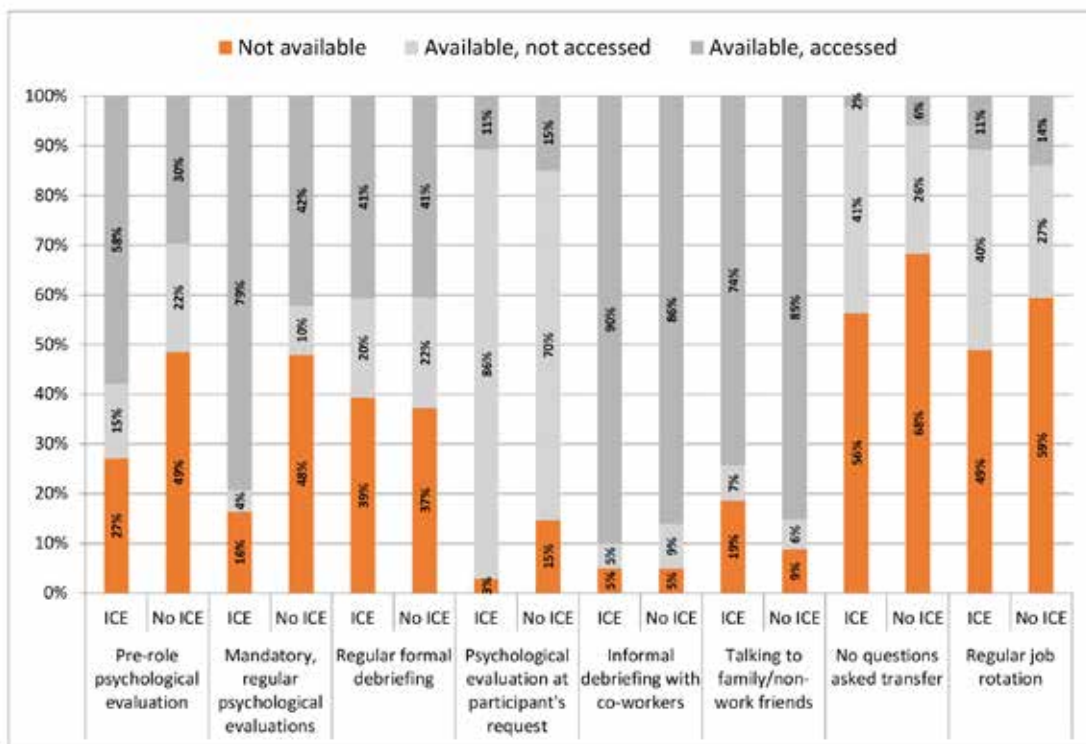
formal debriefings were available to almost two thirds of all participants, and were accessed by two thirds of this subset, with no noticeable difference between ICE and no ICE experience groups. Both no questions asked transfers and regular job rotations were more likely to be available for ICE investigators than the no ICE experience group, but ICE investigators were still less likely to access these forms of support.

Participants also reported how helpful these supports were, if accessed (see Figure 2). Overall, most sources of psychological support were rated similarly by the ICE investigator and no ICE experience groups in terms of helpfulness. Average ratings of all supports were positive, however, the most helpful were identified as no questions asked transfer, informal debriefing with co-workers and psychological evaluation at the participant's request. Regular formal debriefing and talking to family/non-work friends were also rated quite positively. Regular job rotation was rated as more helpful by those with no ICE experience than current ICE investigators, but not drastically so.

Psychological, social and physical factors

Measures of participants' psychological, social and physical characteristics and experiences revealed a range of similarities and differences between the groups (Table 5). Both groups reported average levels of psychological mindedness (i.e., belief in the benefit of discussing problems with others and having access to their own feelings) and were comparably self-sacrificial in their work (mean scores indicated that, in general, both groups were willing to incur some personal costs in the interests of the greater public good, but not to the extent that they would suborn their own wellbeing). Both the ICE investigator and no ICE experience groups had comparable scores on measures of general wellbeing (quality of life, life satisfaction and general mood), depression, anxiety, general stress, post-traumatic stress and psychosomatic complaints. On the whole, mean scores on these scales were generally not cause for concern. For example, mean general mood was elevated; mean depression, anxiety and stress scores were low; and PTSD Checklist total mean score was approximately half of the clinical cut-off score.

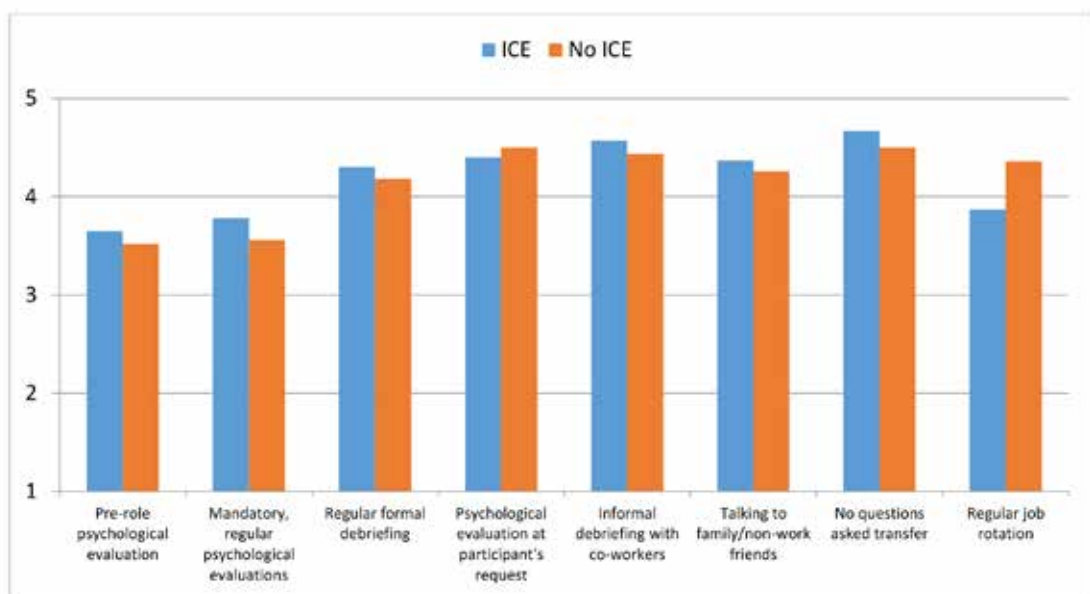
Figure 1 Rates of availability and access of organisational support across ICE and no ICE experience groups



However, a small subset of participants from both ICE and no ICE experience groups presented with problematic scores on some scales. For example, small percentages of ICE investigator (4.4%) and the no ICE experience (4.0%) groups had clinically elevated total scores (44 or higher) on the PTSD Checklist, suggesting that these individuals presented with some concerning symptoms consistent with post-traumatic stress. Scores from the depression, anxiety and stress scales were translated into clinical ranges as per the manual⁶⁶, depicted in Figure 3. While the vast majority (over 90%) of participants had scores that fell within the “normal” (i.e., subclinical) range for each of the scales, a small proportion of participants had mild to severe elevations on the depression (9.2%), anxiety (5.5%) and stress (7.1%) scales (collapsing across both ICE and no ICE experience groups). A very small subset of participants (1 to 2%) had severe or extreme scores for each of these scales. No striking differences were observed between the ICE and no ICE experience groups across the scales.

Group differences were observed on some other scales. Results showed that ICE investigators scored significantly higher on a measure of work disengagement in comparison to the no ICE experience group, however, the difference in means was quite small. ICE investigators reported closer relationships with their co-workers than the no ICE experience group, but there were no significant differences observed in relation to supportiveness in their non-work relationships, protectiveness towards loved ones and distrust of the general public. A notable difference was observed between ICE and no ICE experience groups in relation to post-traumatic growth. The ICE investigator group scored significantly lower across all subscales of the Post-Traumatic Growth Inventory than the no ICE experience group. Results showed that in comparison to the no ICE experience group, the ICE investigators were less likely to have increased appreciation of life, optimism about new possibilities, personal strength, spiritual change and improved ability to relate with others since beginning in their current work role.

Figure 2 Reported helpfulness of psychological supports across ICE investigator and no ICE experience groups



Summary of ICE vs. no ICE experience

The participants in this sample, whether they had been engaged in ICE investigation or not, were generally free from psychological, social or physical problems that may be attributed to their potentially traumatising work roles. The control group did have slightly more supportive non-work relationships than incoming or former investigators and were slightly less distrusting of the general public than incoming investigators. Members of the control group were also better able to develop a greater appreciation of life than current, incoming or recently hired ICE investigators. Most participants, however, reported experiencing some level of posttraumatic growth. Results from the burnout analyses showed that current ICE investigators were slightly more likely to feel

disengaged from their work than the control group, but also slightly less likely to feel exhausted. This suggests ICE investigators have a greater tendency than other police to find the content of their work overtaxing, and to respond by withdrawing. The control group, however, found their work more physically, emotionally and cognitively draining than the current ICE investigators.

Investigation of ICE material was not associated with increased levels of PTSD (or any of the symptoms of PTSD), depression, anxiety or stress. This is not to say that ICE investigation is without risk. Participants within the current sample were not entirely free from symptoms of burnout, depression, anxiety, stress or PTSD, but the symptoms of these conditions were not present at clinically significant levels for the majority of individual participants. The

Table 5 Mean scores on psychological, social and physical measures for current ICE investigators and those without ICE investigation experience

Psychological/social/physical factors		Current ICE investigators	No ICE experience
Quality of life	Personal wellbeing	7.94	8.15
	Life satisfaction	7.94	8.25
General mood		7.84	8.16
Psychological mindedness	Belief in benefits of discussing problems	3.11	3.08
	Access to feelings	4.17	4.25
Self-sacrifice		3.21	3.33
Post-traumatic growth	Appreciation of life	1.70***	2.42***
	New possibilities	1.33*	1.73*
	Personal strength	1.54***	2.24***
	Spiritual change	0.36*	0.64*
	Relating to others	1.08**	1.50**
Post-traumatic stress	Intrusive recollections	6.41	6.36
	Avoidance	8.93	9.13
	Hyperarousal	7.31	7.52
Depression, anxiety & stress	Depression	1.49	1.38
	Anxiety	0.57	0.62
	Stress	2.51	2.11
Burnout	Disengagement	2.37*	2.25*
	Exhaustion	2.24	2.26
Interpersonal relationships	Supportive (non-work)	3.55	3.72
	Protectiveness	3.10	3.00
	Co-worker	3.39**	3.06**
	Distrust of public	2.61	2.60
Psychosomatic complaints		1.70	1.74

* p<.05 ** p<.01 *** p<.001

equivalence between ICE investigators and the control group across a range of predictors and outcomes, however, contradicts the idea that ICE investigation is necessarily more generally debilitating to more personnel than other forms of law enforcement work.

2. Variations among ICE investigators

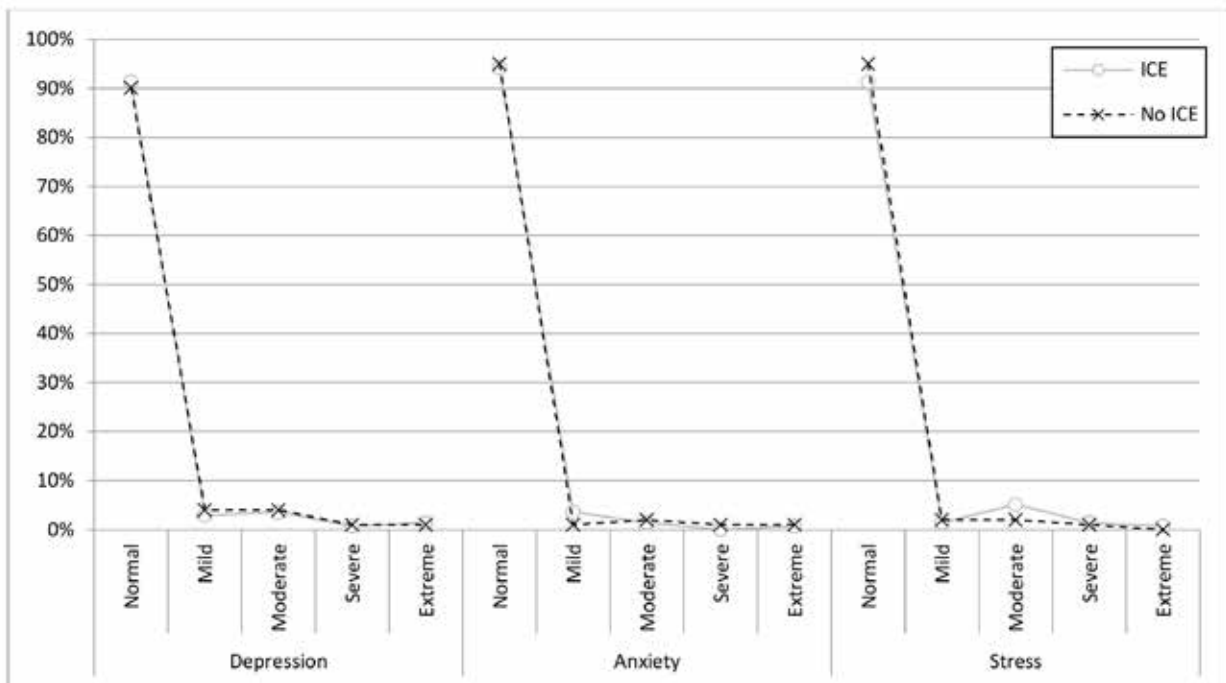
Groups of incoming (n = 8), current with less than 6 months experience (n = 15), current with more than 6 months experience (n = 126), and former (n = 39) ICE investigators were compared across a range of individual and job-related factors. As with the previous section, differences in group means were tested for statistical significance using ANOVA. It should be noted that the sample size for “incoming” and “recent” (tenure of less

than 6 months) ICE investigator groups were quite small, therefore limiting the generalisability of the findings with respect to these groups and the ability to analyse these data statistically.

Demographic factors

Demographic comparisons between the four groups are presented in Table 6. Given the group sizes, the variations in demographic data between groups are not particularly remarkable, but highlight that the majority of current and former ICE investigators in the sample were male (approximately two thirds), were in relationships and had children. Although the group sizes were small, the “incoming” and “recent” ICE investigator recruits were primarily female.

Figure 3 Clinical ranges of depression, anxiety and stress scales (from DASS-21) for ICE and no ICE experience groups



Job-related factors

Group comparisons on job-related characteristics are presented in Table 7. The groups reported similar levels of job satisfaction, role overload, pride in their own work unit, social identification with their work group and organisation, perceived respect from other work units, having received a realistic preview of their job before work commencement and work engagement. Mean scores indicated that, on average, participants were satisfied with their job, were neutral as to whether or not they experienced excessive workload, had pride in their work unit, socially identified with their work group and to a slightly lesser extent their organisation, felt respected by other work units, tended to mildly agree that they had received realistic previews of their job and reported slightly positive levels of work engagement.

Psychological, social and physical factors

No significant differences were found between the ICE investigator groups across the psychological, social and physical measures listed in Table 8. Overall, all groups were relatively neutral in seeing the benefit of

discussing one's problems with others, but tended to indicate having good access to their own feelings. All groups reported average tendencies to engage in self-sacrificial behaviour; that is, they tended to balance incurring some personal costs in the interests of the greater public good with ensuring their own needs and wellbeing. All groups reported elevated levels of general wellbeing and average scores (neither low nor elevated) on both burnout subscales. Overall, mean scores for the interpersonal relationships subscales indicated neutral levels of supportiveness in their non-work relationships, protectiveness towards loved ones, quality of co-worker relationships and distrust of the general public, with no significant differences found between groups. Similarly, scales measuring depression, anxiety, stress and post-traumatic stress displayed no significant differences in scores between groups. Mean scores for these scales across the sample were not at concerning levels, but as noted in the Round One section of results, there was still a small subset of participants with problematic scores on these scales.

Table 6 Demographic information for ICE investigator groups

Demographic information		Incoming ICE investigators	ICE inv. <6 months	ICE inv. 6+ months	Former ICE investigators
Gender	Male	1 (12.5%)	6 (40.0%)	82 (65.1%)	24 (61.5%)
	Female	7 (87.5%)	9 (60.0%)	43 (34.1%)	15 (38.5%)
	Not stated	0 (0.0%)	0 (0.0%)	1 (0.8%)	0 (0.0%)
Age	Mean [years]	37.25	36.13	38.80	39.74
Current role tenure	Mean [years]	1.50	0.38**	3.30**	2.53
Marital status	Single	2 (25.0%)	4 (26.7%)	23 (18.3%)	9 (23.1%)
	Life partner	1 (12.5%)	4 (26.7%)	16 (12.7%)	3 (7.7%)
	Married	5 (62.5%)	7 (46.7%)	87 (69.0%)	27 (69.2%)
Parental status	Have children	5 (62.5%)	9 (60.0%)	73 (57.9%)	24 (61.5%)
	Have no children	3 (37.5%)	6 (40.0%)	53 (42.1%)	15 (38.5%)

** p<.01

Table 7 Mean scores on job-related characteristics across ICE investigator groups

Job-related characteristics		Incoming ICE investigators	ICE inv. <6 months	ICE inv. 6+ months	Former ICE investigators
Job satisfaction		4.04	4.09	4.03	3.79
Role overload		2.95	2.41	2.81	2.75
Pride in work unit		4.63	4.64	4.77	4.58
Social identification	With work group	4.04	4.27	4.49	4.28
	With organisation	4.42	3.98	3.91	3.90
Respect from other units		4.45	4.55	4.68	4.59
Realistic job preview	Job requirements	3.48	3.54	3.35	3.29
	Job attractiveness	3.13	3.50	3.36	3.32
Work engagement	Vigour	4.00	3.78	3.89	3.84
	Dedication	4.40	4.32	4.24	4.07
	Absorption	3.90	3.36	3.42	3.36

Table 8 Mean scores on psychological, social and physical measures across ICE investigator groups

Psychological/physical health outcomes		Incoming ICE investigators	ICE inv. <6 months	ICE inv. 6+ months	Former ICE investigators
Quality of life	Personal wellbeing	7.84	8.14	7.92	7.70
	Life satisfaction	8.38	8.13	7.92	7.41
General mood		7.83	7.93	7.82	7.56
Psychological mindedness	Belief in benefits of discussing problems	3.14	3.17	3.10	3.08
	Access to feelings	4.31	4.22	4.16	4.10
Self-sacrifice		3.05	3.27	3.20	3.28
Depression, anxiety & stress	Depression	0.38	0.60	1.60	1.47
	Anxiety	0.75	0.53	0.58	1.03
	Stress	0.88	1.80	2.59	2.29
Post-traumatic stress	Intrusive recollections	5.88	6.73	6.37	6.61
	Avoidance	8.00	8.13	9.02	9.32
	Hyperarousal	5.63	6.80	7.38	7.63
Post-traumatic growth	Appreciation of life	1.29	1.09*	1.78	2.39*
	New possibilities	1.08	0.96	1.37	1.62
	Personal strength	1.19	0.87*	1.62	2.03*
	Spiritual change	0.50	0.20	0.38	0.96
	Relating to others	0.80	0.51*/**	1.15*	1.43**
Burnout	Disengagement	2.31	2.31	2.38	2.36
	Exhaustion	2.28	2.21	2.25	2.29
Interpersonal relationships	Supportive (non-work)	3.15	3.75	3.53	3.21
	Protectiveness	3.05	2.63	3.16	3.22
	Co-worker	3.07	3.40	3.39	3.16
	Distrust of public	3.05	2.35	2.64	2.66
Psychosomatic complaints		1.64	1.80	1.65	1.68

* p<.05 ** p<.01 *** p<.001

Some group differences were revealed in relation to the post-traumatic growth experienced since commencing their current work role. ICE investigators with less than 6 months experience were found to have significantly lower scores than former ICE investigators on three subscales: appreciation of life, personal strengths and relating to others. Additionally, ICE investigators with less than 6 months experience had a significantly lower mean score on the relating to others subscale than ICE investigators with 6 months or more experience. There were no group differences found in relation to the new possibilities and spiritual change subscales of the post-traumatic growth measure. Finally, there were no significant ICE investigator group differences in relation to psychosomatic complaints, and group means indicated that on average, ICE investigators had low scores on this measure.

Summary of variations among ICE investigators

There were few meaningful differences in the responses of current, former and prospective ICE investigators. The only significant differences detected involved relatively low scores on some subscales of posttraumatic growth for ICE investigators of less than 6 months experience. Given that these subscales measure gains that may be realised after exposure to traumatic experiences, it may be speculated that new ICE investigators have not had the time to fully process their experiences in order to make these gains. Overall, results suggest that in most cases there is little difference between new and experienced investigators in the psychological, social and physical effects of ICE investigation. However, this conclusions need to be qualified by acknowledging the small sample sizes which reduce the power of the statistical analyses.

3. Predictors of adjustment

The analysis in this section focuses on the responses from current ICE investigators (n = 141). It examines relationships among the various measures employed in this study in order to identify demographic, organisational and personal factors associated with levels of adjustment. Variables are divided into two categories – predictor variables and outcome variables. Predictor variables are those factors that might influence the effects that ICE investigation has on an individual investigator, either by increasing the risk of, or protecting against, maladjustment. Predictor variables include demographic factors (gender, age, length of tenure as an ICE investigator, whether the investigator is single or in a relationship, and whether or not the investigator has children), experiences and perceptions of the work

environment (job satisfaction, role overload, pride in the work unit, social identification with the work group and with the wider organisation, respect from other units, realistic job preview, and work engagement), and psychological resources (psychological mindedness and self-sacrifice). Outcome variables are the various measures of psychological, social and physical adjustment (personal well-being, life satisfaction, post traumatic growth, post-traumatic stress, depression, anxiety, stress, burnout, interpersonal relationships, and psychosomatic complaints).

The relationship between each predictor and outcome variable was expressed as a correlation coefficient. The correlation coefficient is a simple measure of association⁶⁷ and ranges from -1 to 1. A positive correlation indicates that the two variables in question both move in the same direction (as one increases the other increases); a negative correlation indicates that they move in opposite directions (as one increases the other decreases). As a rule of thumb, correlations of 0-.19 are considered to be negligible; .2-.29 weak; .3-.39 moderate; .4-.69 strong; and greater than .7 very strong.

Results are reported in Table 9. Demographic variables generally emerged as poor predictors of adjustment. There are scattered significant correlations for gender but the strength of association is weak. Males are somewhat more likely to report post-traumatic growth in the form of seeing new possibilities, but are also more likely to experience post-traumatic stress (avoidance and hyperarousal), depression, and stress. The only significant finding for age is that older respondents are more likely to be protective in their interpersonal relationships. Confirming the analysis between new and experienced investigators carried out in section 2, length of tenure as an ICE investigator was not associated with any outcome variables – the effects of ICE investigation on respondents was unrelated to how long they had been in the job. Respondents who had a partner were slightly more likely to receive support in their interpersonal relationships and to be protective towards loved ones. Finally, in what was the strongest correlation found in the study, respondents with children are much more likely to be protective in their interpersonal relationships.

More and generally stronger associations are found for work related variables, with numerous correlations in the moderate and strong ranges. Job satisfaction is predictive of a sense of well-being, life satisfaction, positive general mood, post traumatic growth (relating to others), and positive interpersonal relationships (supportive). It is also negatively related to post-traumatic stress, depression,

Table 9 Correlations between predictor and outcome variables

Predictors	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Gender (F=0; M=1)	-0.02	0.04	-0.03	0.09	0.21	0.15	0.09	0.12	0.09	0.18	0.18	0.21	0.08	0.26	0.08	0.05	0.04	0.14	-0.01	0.08	-0.07
Age	-0.06	0.00	-0.02	0.00	-0.04	-0.02	0.02	0.07	-0.05	0.02	0.06	0.10	0.09	0.08	-0.05	-0.07	0.06	0.26	0.04	-0.14	0.11
Current role tenure	-0.05	-0.03	0.00	0.16	0.10	0.16	-0.06	0.15	0.09	0.14	0.13	0.07	0.04	0.09	0.14	0.06	-0.13	0.11	0.00	0.11	0.01
Partner (N=0; Y=1)	-0.07	0.02	0.00	0.05	-0.08	-0.06	-0.02	-0.05	0.14	0.14	0.10	0.05	0.15	0.16	0.07	0.12	0.20	0.28	-0.01	0.10	0.09
Children (N=0; Y=1)	0.00	0.05	0.09	-0.05	-0.03	-0.09	-0.13	-0.07	-0.10	-0.08	0.06	-0.03	0.05	0.02	-0.10	-0.09	0.13	0.71	-0.10	-0.07	0.07
Job satisfaction	0.28	0.31	0.42	0.02	0.18	0.08	0.12	0.18	-0.39	-0.34	-0.34	-0.49	-0.33	-0.43	-0.64	-0.54	0.27	0.02	-0.03	-0.43	-0.32
Role overload	-0.13	-0.10	-0.18	0.04	-0.09	0.00	-0.11	-0.11	0.35	0.36	0.35	0.31	0.28	0.40	0.46	-0.52	-0.30	0.01	0.24	0.33	0.27
Pride in work unit	0.20	0.23	0.38	0.08	0.19	0.12	0.10	0.18	-0.32	-0.24	-0.28	-0.32	-0.25	-0.35	-0.60	-0.46	0.29	0.02	-0.05	-0.37	-0.32
Social identification - group	0.07	0.12	0.30	0.15	0.18	0.24	0.01	0.24	-0.15	-0.10	-0.08	-0.18	-0.21	-0.12	-0.43	-0.30	0.26	0.07	0.21	-0.26	-0.18
Social identification - organisation	0.17	0.18	0.34	0.02	0.13	0.15	0.12	0.17	-0.19	-0.26	-0.31	-0.32	-0.29	-0.25	-0.48	-0.40	0.28	0.01	-0.06	-0.34	-0.23
Respect from other units	0.15	0.03	0.23	0.07	0.13	0.19	0.07	0.23	-0.07	-0.09	-0.19	-0.20	-0.19	-0.24	-0.44	-0.27	0.24	-0.12	0.03	-0.31	-0.23
Realistic job preview - requirements	0.15	0.12	0.28	-0.02	0.09	0.10	0.09	0.14	-0.34	-0.34	-0.33	-0.36	-0.31	-0.31	-0.39	-0.49	0.22	-0.04	-0.20	-0.36	-0.23
Realistic job preview - attractiveness	0.10	0.01	0.15	0.01	0.07	0.15	0.01	0.14	-0.34	-0.29	-0.23	-0.24	-0.34	-0.26	-0.29	-0.53	0.17	-0.16	-0.07	-0.29	-0.17
Work engagement - vigour	0.32	0.29	0.47	0.09	0.16	0.19	0.15	0.23	-0.18	-0.21	-0.37	-0.46	-0.34	-0.31	-0.58	-0.55	0.22	-0.08	0.05	-0.42	-0.45
Work engagement - dedication	0.27	0.26	0.41	0.09	0.15	0.18	0.16	0.22	-0.14	-0.19	-0.33	-0.45	-0.32	-0.32	-0.60	-0.45	0.30	0.01	0.07	-0.34	-0.35
Work engagement - absorption	0.14	0.09	0.27	0.12	0.18	0.19	0.11	0.25	0.07	0.03	-0.25	-0.25	-0.16	-0.05	-0.41	-0.19	0.10	-0.08	0.22	-0.19	-0.20
Psych mindedness - discuss problems	0.17	0.11	0.13	0.16	0.13	0.20	0.14	0.30	-0.14	-0.23	-0.15	-0.37	-0.30	-0.28	-0.29	-0.27	0.28	0.06	0.14	-0.25	-0.09
Psych mindedness - access to feelings	0.27	0.19	0.35	0.01	0.11	0.07	0.02	0.15	-0.29	-0.38	-0.39	-0.49	-0.35	-0.45	-0.41	-0.41	0.40	0.04	0.04	-0.37	-0.19
Self-sacrifice	0.09	-0.01	0.13	0.05	0.18	0.11	0.18	0.04	0.12	0.05	-0.05	-0.10	-0.03	-0.06	-0.17	-0.03	0.07	0.10	0.10	0.06	-0.17

Significant correlations (p<.05) in bold

Key for outcome variables		
1. Personal wellbeing	8. PTG – relating to others	15. Burnout – disengagement
2. Life satisfaction	9. PTS – intrusive recollections	16. Burnout – exhaustion
3. General mood	10. PTS – avoidance	17. Interpersonal relationships – supportive
4. PTG – appreciation of life	11. PTS – hyperarousal	18. Interpersonal relationships – protectiveness
5. PTG – new possibilities	12. DASS – depression	19. Interpersonal relationships – co-worker
6. PTG – personal strength	13. DASS – anxiety	20. Interpersonal relationships – distrust of public
7. PTG – spiritual change	14. DASS – stress	21. Psychosomatic complaints

anxiety, stress, burnout and psychosomatic complaints. Role overload is associated with reduced general mood, increased post-traumatic stress, increased depression, anxiety and stress, less supportive interpersonal relationships, greater distrust of the public, and more psychosomatic complaints. On a more positive note, role overload is also associated with an increased cohesion with co-workers, presumably because under conditions of overload staff must work more closely together to manage the workload.

Four predictors – pride in work unit, social identification with the work unit, social identification with the organisation, and respect from other units – were concerned with perceptions of the work unit. All four variables were associated with increased general mood, increased post-traumatic growth (relating to others), lower depression, lower anxiety, lower burnout, more supportive interpersonal relationships, less distrust of the public, and fewer psychosomatic complaints. One or more of these variables were also associated with an increased sense of wellbeing, greater life satisfaction, increased post-traumatic growth (new possibilities and personal strength), reduced post-traumatic stress, lower stress, and great cohesion with co-workers.

Two scales tapped how realistic – in terms of requirements and attractiveness – the information investigators received about the role was prior to commencement in the job. Together these two scales were associated with decreased post-traumatic stress (intrusive recollections, avoidance and hyperarousal), reduced depression, anxiety and stress, reduced burnout, more supportive interpersonal relationships, reduced distrust of the public, and fewer psychosomatic complaints. The requirements scale was individually related to increased general mood and increased interpersonal relationships with co-workers.

The three work engagement scales – vigour, dedication and absorption – were collectively related to increased general mood, increased post-traumatic growth (personal strength and relating to others), lower post-traumatic stress (hyperarousal), lower depression, lower anxiety, lower burnout, less distrust of the public, and fewer psychosomatic complaints. One or two scales were further related to increased wellbeing, increased life satisfaction, lower post-traumatic stress growth (intrusive recollections and avoidance), decreased stress, more supportive interpersonal relationships and closer connections with co-workers.

Finally three scales examined psychological

characteristics that might increase resilience to stressful situations, with some correlations in the strong range. The two subscales of the psychological mindedness scales – belief in discussing problems and access to feelings – together were associated with increased personal wellbeing, lower post-traumatic stress (avoidance), lower depression, anxiety and stress, lower burnout, more supportive interpersonal relationships, and less distrust of the public. One or another of the scales were related to greater life satisfaction, greater post-traumatic growth (personal strength and relating to others), lower post-traumatic stress (intrusive recollections and hyperarousal), and fewer psychosomatic complaints. The self-sacrifice scale had just four weak associations, involving increased post-traumatic growth (new possibilities and spiritual change), lower burnout, and fewer psychosomatic complaints.

Summary of predictors of adjustment

Results for this section indicate that there are few differences in the psychological, social and physical outcomes associated with ICE investigation in terms of investigator gender, age and family status. Further, outcomes were not associated with length of service as an ICE investigator, suggesting that for most investigators the effects of ICE investigation are not cumulative. However, there were weak to strong associations between the outcomes of ICE investigation and a range of work related and psychological factors. Work factors that seemed to protect against adverse outcomes included enjoying the work, having pride in the work unit, identifying with the work unit and the organisation more broadly, receiving realistic information about the role prior to commencement, and becoming involved in and committed to the work. In terms of psychological characteristics, investigators who were prepared to discuss their problems and who had access to their feelings suffered fewer ill effects than other investigators. In sum, creating work environments that foster a realistic sense of common purpose and achievement, and encouraging investigators to reflect on and share their thoughts and feeling about their work, can help to mitigate the potentially traumatic impacts of ICE investigation.

4. ICE-specific factors

This section examines questions relating specifically to experiences of being exposed to ICE material and answered only by the 180 current and former ICE investigator participants. Only descriptive statistics

(means and percentages) are reported in this section. The focus was on outlining the activities and views of experienced investigators, rather than comparing among groups.

Job-related factors

The job tasks performed by the ICE investigators are listed in Table 10. The proportion of ICE investigators who reported performing the job task is also included in the table, and the tasks are sorted from most performed to least performed. The most commonly performed tasks include sharing information with colleagues, searching data storage devices for illegal material and performing administrative duties, whereas the least commonly performed tasks include community education activities

and role playing as either a victim or offender to engage with other potential offenders.

ICE investigators in the sample provided estimates of their frequency and duration of exposure to ICE material (see Table 11). Results indicated a wide range of exposure to ICE material among participants, but also show that in an average week, very high numbers of ICE images can be viewed. ICE investigators reported that on average, approximately half of the material viewed during their investigation constitutes legal pornography, and that a reasonable proportion of material cannot definitively be classified as ICE-related due to difficulties identifying victim ages or the material not meeting legal definitions.

Table 10 Percentage of ICE investigators who perform task as a part of their work role

Task	%
Sharing job related knowledge with colleagues	91.3
Searching an alleged offender’s data storage devices for incriminating personal communications	87.6
Performing administrative duties relevant to undertaking an ICE investigation	86.3
Searching data storage devices for the presence of ICE material	85.7
Preservation of electronic evidence	85.1
Physically searching an alleged offender’s premises for incriminating evidence	84.5
Participation in court proceedings	83.9
Writing reports for use in legal proceedings	82.6
Following leads supplied by the general public	80.7
Preservation of physical evidence	80.6
Collaboration with civilian professionals (e.g. lawyers, child safety workers or medical professionals)	77.6
Classification of ICE material by content	77.0
Interviewing alleged offenders	77.0
Collaboration with interstate ICE investigators	75.8
Providing social support to colleagues	67.7
Participation in training activities specific to ICE investigation	64.6
Searching publicly accessible websites for evidence of ICE material	62.1
Collaboration with international ICE investigators	57.8
Providing advice and assistance to non-specialist police units on how to identify, process and preserve evidence of ICE material	57.1
Identification of victims	52.8
Identification of production/distribution/consumer supply chains from clues contained within confiscated material or records	50.9
Interviewing victims	49.7
Locating victims	49.1
Searching an alleged offender’s financial records for incriminating evidence	45.3
Trying to follow production/distribution/consumer supply chains from clues contained within confiscated material or records	41.6
Participation in community education activities specific to ICE	38.5
Role playing as a child while interacting with a potential offender/s	26.1
Role playing an offender while interacting with a potential offender/s	16.1

Participants were asked to respond to items asking about personal and organisational practises or processes they may have performed or experienced while working in ICE investigation (see Table 12). The five items that received the highest mean level of agreement were: *At my own discretion I am able to take a break if I feel myself becoming uncomfortable; In our unit we have developed a unique sense of humour and in-jokes which helps break the tension; At my own discretion, I can limit the amount of time (in each shift) that I am exposed to ICE material; I am able to view ICE material at the start of the shift and do other work later on; and In our unit we view ICE material alone.* The five items receiving the lowest endorsement were: *I have heard it suggested that ICE investigation is not 'real' police work; I volunteered for work as an ICE investigator because it increases my chance of promotion; I volunteered for work as an ICE investigator because it pays more than my previous role; I sometimes feel concerned that I might develop an unprofessional interest in ICE material; and I sometimes have unwanted, intrusive sexual fantasies similar to ICE material.*

These findings suggest ICE investigation tends to be a solitary activity. However, ICE investigators are allowed a degree of autonomy over the way they conduct their work in order to manage potentially stressful activity. The five items receiving the least endorsement suggest ICE investigators typically do not hear negative comments about their work, are generally not motivated to apply for an ICE investigator role due to extrinsic concerns and are not concerned about developing an attraction to ICE material (although they are somewhat more concerned that a colleague might).

Table 11 Descriptive statistics for average ICE material exposure and other categories of material

Question	Average	Min.	Max.
On average, how many hours a week would you view ICE material?	8.5	1	40
On average, how many consecutive hours would you spend viewing ICE material in a single sitting?	3.2	0	9
On average, how many days a week would you view ICE material?	2.6	0	5
On average, how many ICE images would you view in a week?	4236.4	0	100000
On average, how many ICE images would you view in a shift?	1897.3	1	40000
On average, how many ICE images would you view in a single sitting?	1421.0	1	40000
On average, what percentage of the material you view during a typical ICE investigation would be considered legal pornography?	44.3%	0%	95%
On average, what percentage of the material you view during a typical ICE investigation cannot definitely be classified as illegal because it is impossible to verify the age of those involved?	26.0%	0%	80%
On average, what percentage of the material you view during a typical ICE investigation cannot definitely be classified as illegal as the material does not fit within the legislated definition of ICE material?	19.1%	1%	80%

Table 12 Descriptive statistics for personal and organisational practices and processes experienced or used by ICE investigators

Practice or Process	M	SD
At my own discretion I am able to take a break if I feel myself becoming uncomfortable.	4.27	.65
In our unit we have developed a unique sense of humour and in-jokes which helps break the tension.	4.14	.76
At my own discretion, I can limit the amount of time (in each shift) that I am exposed to ICE material.	3.93	.90
I am able to view ICE material at the start of a shift and do other work later on.	3.91	.82
In our unit we view ICE material alone.	3.91	.83
At my own discretion, I am able to intersperse periods of viewing material with periods of work on other tasks.	3.90	.88
I think of the ICE material as evidence to be gathered and processed like any other type of evidence.	3.85	.75
In my unit it is considered acceptable to seek psychological assistance if exposure to ICE material is becoming a problem.	3.82	.88
I am able to shut down my emotions and view the material objectively.	3.76	.84
My supervisor understands how effective ICE investigations must be conducted.	3.75	.95
My supervisor understands the unique pressures of ICE investigation.	3.72	1.04
I enjoy the technical challenge involved in investigating ICE offending.	3.72	.84
Staff get more out of talking with their work colleagues within the unit about the problems they are experiencing than by talking to professional counsellors.	3.57	.94
My supervisor provides support that maintains my efficiency as an ICE investigator.	3.54	1.03
In our unit we have a private area for viewing ICE material.	3.53	1.21
If I were worried that one of my co-workers had developed an unprofessional interest in ICE material I would be able to get them help from inside my organisation.	3.52	.94
I have been taught how to use my computer and software as tools for ICE investigation.	3.51	.91
I have been taught how to perform all necessary steps of the ICE investigation process.	3.48	.86
I volunteered to work in ICE investigation because it is a way in which I can have a positive impact on society.	3.44	.93
I have opportunities to sharpen my investigatory skills through additional training.	3.42	.92
My organisation provides me with computer and software which are adequate for use in ICE investigation.	3.42	.97
Exposure to ICE material is the most difficult part of this job to deal with.	3.29	1.11
My organisation does not accord ICE investigation the importance it deserves.	3.26	1.25
My organisations employee assistance staff understand the unique pressures of ICE investigation.	3.26	1.04
I have time at work to mentally prepare myself for viewing ICE material before I begin viewing.	3.25	.98
I can leave ICE investigation for another role without penalty or having to explain myself.	3.20	1.18
My organisations employee assistance staff understand how effective ICE investigation must be conducted.	3.10	1.02
My organisations pre-employment selection process ensures that only suitable people are engaged as ICE investigators.	3.05	.99
My organisation's employee assistance staff tailors their support to suit the unique requirements of ICE investigators.	2.98	1.0
In our unit, we would never discuss the possibility that one of our own could begin to like ICE material.	2.81	1.10
I avoid looking at expressive features such as the eyes.	2.77	.95
I could tell if one of my co-workers had begun to use ICE material for personal gratification.	2.70	.88
In my organisation ICE investigators are given useful assistance when they are moving into a more 'mainstream' police role.	2.68	.93
It is impossible for an ICE investigator to develop an unprofessional interest in ICE material	2.53	.99
I worry that an ICE investigator could get themselves into trouble by developing an unprofessional interest in ICE material.	2.38	.99
I tend to identify with the victims.	2.34	.86
In our unit we view ICE material as a group.	2.29	1.01
I am able to pretend that the victims are not real people.	2.28	.88
I was gradually exposed to the more explicitly abusive material over time.	2.21	.95
Before I formally accepted the role of ICE investigator I was shown a representative sample of the sorts of material I would be working with.	2.21	1.11
In our unit we view ICE material in pairs.	2.14	.99
I sometimes feel guilty about viewing ICE material, even though I am only doing so for my job.	2.06	.94
Sometimes I take a 'sickie' if I feel that viewing ICE material is starting to get to me.	1.99	.80
I did not volunteer to work in ICE investigation, but was assigned without regard for my personal preference.	1.95	.96
I have heard it suggested that working in the ICE unit must mean I want to watch the material.	1.93	.95
I have heard it suggested that ICE investigation is not 'real' police work.	1.92	1.01
I volunteered for work as an ICE investigator because it increases my chance of promotion.	1.77	.82
I volunteered for work as an ICE investigator because it pays more than my previous role.	1.63	.76
I sometimes feel concerned that I might develop an unprofessional interest in ICE material.	1.61	.75
I sometimes have unwanted, intrusive sexual fantasies similar to the ICE material.	1.37	.69

Table 13 Descriptive statistics for ICE investigators agreement with strategies organisations could implement in order to protect investigator wellbeing

Practice or Process	M	SD
The equipment used for ICE investigation should be regularly updated.	4.56	.56
All ICE staff should be able to transfer out of the unit to another area of investigation in the police - on their request.	4.45	.62
The organisation should increase the number of ICE investigators to make it easier to cope with the increasing workload.	4.45	.69
Organisations should use image recognition software that scans, classifies and stores previously encountered ICE material without a person having to view it.	4.40	.79
There should be mandatory psychological evaluation of all incoming staff who are likely to be exposed to ICE material.	4.38	.66
Supervisors should be educated about the realities of ICE investigation so that they will know how to support staff exposed to ICE material.	4.28	.56
All incoming staff that are likely to be exposed to ICE material should be informed about the full range of known difficulties (physical, social and psychological) that have been experienced by ICE investigators.	4.27	.57
ICE investigators should be given training in information technology.	4.27	.65
There should be regular mandatory psychological evaluation of all staff who have been exposed to ICE material.	4.23	.67
Employee assistance staff should be educated about the realities of ICE investigation so that they will know how to support staff exposed to ICE material.	4.23	.61
ICE investigators should be given training in procedural matters that affect the likelihood of an offender being set free on a legal technicality.	4.23	.63
ICE unit supervisors should be screened for suitability for working with staff that have been exposed to ICE material.	4.21	.70
During each day staff should be allowed to rotate through various tasks so that they are not spending all of their time viewing ICE images.	4.18	.64
The value of ICE investigation should be promoted to all levels within the organisation.	4.18	.70
All incoming staff that are likely to be exposed to ICE material should be screened for life experiences that are known to increase vulnerability to harm from exposure to ICE material.	4.16	.71
All staff that have been exposed to ICE material should be encouraged to talk with someone they trust about any difficulties they may be having.	4.16	.58
Employee assistance providers should be screened for suitability for working with staff that have been exposed to ICE material.	4.14	.75
How well an incoming staff member will fit in with existing personnel should be considered during the selection process.	4.14	.78
All staff that have been exposed to ICE material should be allowed a sufficient amount of time to 'clear their head ' before they go home.	4.10	.76
Organisations should ensure that the ICE room is a pleasant place to be (e.g. spacious, attractively furnished, decorations, windows etc.) as physical comfort lessens psychological discomfort.	4.07	.74
ICE investigators should be given training that will increase their ability to provide each other with social support.	4.02	.76
All incoming staff that are likely to be exposed to ICE material should be shown a sample of 'typical' ICE material before they commence working in an ICE unit.	3.99	.87
ICE units should only employ police officers who volunteer to work in the unit	3.93	1.02
All ICE units should contain male and female investigators as this makes for a more supportive work environment.	3.79	.84
An overview of ICE investigation should be included in basic police training.	3.77	.92
There should be a maximum limit on the amount of material that can be viewed (within a shift).	3.76	.92
Information technology specialists working with ICE investigators should be given criminal investigation training.	3.71	1.02
ICE units should only employ officers with demonstrated competence as criminal investigators (not necessarily restricted to ICE).	3.70	.96
Organisations should prepare educational material suitable for building empathy within the families of all staff who have been exposed to ICE material.	3.62	.86
All psychological counselling and assessments of ICE staff should be conducted by outside professionals, not from within the police.	3.35	1.10
Investigators should not be exposed to ICE material without another investigator being present.	2.86	.93
There should be mandatory reassignment to another area of investigation after a fixed period of time.	2.79	1.23
Staff should be forced to take holidays when they are due.	2.73	1.02

Table 13 presents the averaged participant agreement with possible strategies organisations could implement as a means of protecting investigator wellbeing. The five items that received the highest level of agreement were: *The equipment used for ICE investigation should be regularly updated; The organisation should increase the number of ICE investigators to make it easier to cope with the increasing workload; All ICE staff should be able to transfer out of the unit to another area of investigation in the police – on their request; Organisations should use image recognition software that scans, classifies and stores previously encountered ICE material without a person having to view it; and There should be mandatory psychological evaluation of all incoming staff who are likely to be exposed to ICE material.* The five items that received the lowest level of agreement were: *Organisations should prepare educational material suitable for building empathy within the families of all staff who have been exposed to ICE material; All psychological counselling and assessments of ICE staff should be conducted by outside professionals, not from within the police; There should be mandatory reassignment to another area of investigation after a fixed period of time; Investigators should not be exposed to ICE*

material without another investigator being present; and Staff should be forced to take holidays when they are due. Note that the levels of the means suggests that objections to these strategies were weak, with the lowest four being closest to neutral while there was some agreement with the strategy of educating families of ICE investigators.

The five strategies receiving the strongest endorsement appear to reflect dual concern with maintaining or improving workforce capacity and proactively lessening the likelihood of encountering experiences that could be detrimental to investigator wellbeing. Those strategies receiving the lowest endorsement seem to reflect a variety of concerns. Objections to educating families may be motivated by a desire to protect families and to keep work and home separate. Resistance to using outside counsellors may stem from a belief internal counsellors are more likely to acquire an understanding of ICE investigation and ICE investigators. Objections to mandatory reassignment and being forced to take holidays suggest that staff are not particularly concerned about the cumulative effects of viewing ICE material. The reluctance to view ICE material in pairs may reflect a belief that such a strategy will be ineffective in helping to reduce occupational stress, or it may be based on more practical concerns about rostering and efficiency.

Table 14 Ratings for how disturbing investigators find various types of ICE material

Item	M	SD
Material showing a child being tied, bound, beaten, whipped or otherwise subjected to something that implies pain.	4.30	1.06
Material where an animal is involved in some form of sexual behaviour with a child.	4.23	1.78
Material where the video is accompanied by audio.	4.10	1.18
Material graphically portraying sexual assault involving penetrative sex, masturbation or oral sex involving an adult.	3.98	1.22
Live streaming video material.	3.58	1.83
Material showing a child being subjected to sexual assault, involving touching by an adult.	3.39	1.23
Deliberately posed material emphasising genital areas where a child is either naked, partially clothed or fully clothed.	3.14	1.27
Material containing deliberately posed children fully clothed, partially clothed or naked in sexualised or provocative poses.	2.82	1.28
Material containing deliberately posed children fully clothed, partially clothed or naked (where the amount, context and organisation suggests sexual interest).	2.75	1.22
Material which is predominantly written text.	2.67	1.38
Surreptitiously taken material showing children in play areas or other safe environments showing either underwear or varying degrees of nakedness.	2.66	1.23
Material containing naked or semi-naked children in settings where minimal clothing is legal (e.g. nudist colonies or store catalogues).	2.09	1.18
Non-erotic and non-sexualised material showing children in their underwear, swimming costumes etc. from benign sources such as family albums or children playing in normal settings, in which the context or organisation of pictures by the collector indicates inappropriateness.	1.79	1.06

One item asked participants for their opinion as to how long an ICE investigator should be exposed to ICE material before being assigned to other duties. The average response option was up to 5 years (M = 3.12, SD = 1.18).

The desirability of particular traits or characteristics (as rated by investigators) for coping with ICE investigation are reported on Table 15. The five traits or characteristics that received most support were: *Someone who can separate what they experience at work from their life outside work; Someone who is generally emotionally stable; Someone who can maintain emotional detachment from the victims without losing the capacity to care for them; Someone who is generally comfortable discussing sexual matters; and Someone who can cultivate a sense of humour that others may find overly dark or offensive but never demeans the victims.* The five least desirable traits or characteristics were: *Someone who tends to be moralistic; Someone who feels a high level of empathy with victims; Someone who holds strong religious beliefs; A parent with children similar to victims viewed in ICE material; and Someone who has been sexually abused at some point in their life.*

These findings suggest ICE investigators believe maintenance of a professional distance increases coping ability. Coping is believed to be less successful if an investigator's personal values or life experiences make it more difficult to maintain a level of distance from what is encountered during an ICE investigation.

Summary of ICE specific factors

There was considerable variety in the tasks performed by ICE investigators, and in the degree of involvement each investigator had in those tasks. On average investigators spend half their week (2.6 days) viewing ICE images and view more than 4,000 images in that time. The majority of ICE investigators reported having flexibility in how they structured their workday and they were equivocal on whether exposure to ICE material represented the most difficult aspect of the job to deal with. Very few ICE investigators reported having personal concerns about themselves having inappropriate responses to ICE material. They were only marginally more concerned about their current co-workers having inappropriate

Table 15 Descriptive statistics for traits possessed by people best able to cope with exposure to ICE Material

Trait	M	SD
Someone who can separate what they experience at work from their life outside of work.	4.16	.57
Someone who is generally emotionally stable.	4.13	.61
Someone who can maintain emotional detachment from the victims without losing the capacity to care for them.	4.11	.59
Someone who is generally comfortable discussing sexual matters.	3.75	.82
Someone who can cultivate a sense of humour that others may find overly dark or offensive but which never demeans the victims.	3.75	.85
Someone whose personal life is in good order (e.g. no financial problems, good personal relationships)	3.70	.74
A sworn police officer.	3.69	.98
Someone without a history of impaired mental health prior to ICE exposure.	3.61	1.18
Someone who exercises regularly.	3.54	.79
Someone who believes that the protection ICE investigation provides to children is worth any discomfort the investigator may feel.	3.45	.97
Someone who has never suffered an extreme adverse reaction when previously exposed to potentially traumatic events.	3.37	.96
Someone without existing serious physical problems prior to ICE exposure.	3.25	.95
Male.	3.17	.71
Female.	3.01	.69
Someone who tends to be moralistic.	2.92	.90
Someone who feels a high level of empathy with victims.	2.86	.87
Someone who holds strong religious beliefs.	2.48	.79
A parent with children similar to victims viewed in ICE material.	2.44	.78
Someone who has been sexually abused at some point in their life.	1.75	.90

responses to ICE material, but generally did not discount the possibility of this becoming an issue.

In terms of managing the possible harmful effects of ICE material on employees, most investigators agreed that there should be regular mandatory psychological evaluation of staff although they believed that this was better handled by in-house professionals than by external providers. They generally did not agree with mandatory reassignment after a fixed period, but nevertheless thought that on average the length of time in the role should be around 5 years. The most effective ICE investigators were judged to be individuals who can maintain an emotional detachment from the victims portrayed in ICE images, and can separate their work and home life.

5. Longitudinal analysis

Data were analysed for the small sample of participants (n = 37) who completed the questionnaire at both time periods – T1 and T2. The average time between T1 and T2 was 10.5 months (range 9 to 13 months). Three groups contributed longitudinal data – current ICE investigators (n = 24), former ICE investigators (n = 6) and those with no ICE investigation experience (n = 7). Data are examined using univariate analysis of variance (ANOVA).

Findings are presented in Tables 16 and 17. No statistically significant differences were found between any T1 and T2 means, indicating general stability for all groups across both time periods. Although there are some observable differences between T1 and T2 means for some factors, the small group size and lack of statistical significance makes it difficult to conclude whether or not

Table 16 Mean scores on measures of job-related characteristics across time periods by current role category

Job-related characteristics		Current ICE investigators		Former ICE investigators		No ICE experience	
		T1	T2	T1	T2	T1	T2
Job satisfaction		4.19	4.14	3.94	3.50	4.00	4.29
Role overload		2.59	2.62	2.63	2.03	2.49	2.77
Pride in work unit		4.90	4.88	4.50	3.83	5.31	5.37
Social identification	With work group	4.53	4.46	4.06	3.39	4.76	4.81
	With organisation	4.00	4.04	3.06	3.39	4.00	4.29
Respect from other units		4.75	4.76	4.74	4.43	4.73	4.73
Realistic job preview	Job requirements	3.40	3.47	3.67	3.07	3.83	3.93
	Job attractiveness	3.43	3.56	3.50	3.17	3.58	3.63
Work engagement	Vigour	4.07	4.12	3.72	3.36	3.67	3.81
	Dedication	4.65	4.51	4.03	3.23	3.97	4.03
	Absorption	3.37	3.30	3.25	2.83	3.12	3.10

the differences are meaningful. Given this uncertainty, these observed (non-significant) differences in group means will not be interpreted further.

While on average there was little change in scores between T1 and T2, it may be that these averages mask problematic increases for a small number of individual officers. Closer inspection reveals this to be the case on some key scales (notably, the depression, anxiety and stress scales and the post-traumatic stress scale). Figures 4-6 show the changes in total scores on the depression, anxiety and stress subscales between T1 and T2 for the three groups. Positive numbers indicate a higher score at T2 (compared to T1) and therefore an increase in symptoms over time, and negative numbers indicate a lower number at T2, thereby reflecting a decrease in symptoms over time. Zero scores indicate no change. The figures show most

participants did not change from T1 to T2, a number of participants, and particularly several current investigators, show marked elevations in their scores. (Equally, a number of participants had lower scores at T2). Table 18 shows the changes for current investigators in terms of clinical categories. Most investigators scored in the normal range on both occasions. However for the depression scale, one investigator moved from normal to mild, while another moved from moderate to extremely severe. There was no change for the anxiety scale. For the stress scale, one investigator moved from normal to moderate. In contrast, there was only one change for the other two groups, with one former investigator moving from normal to mild on the depression scale.

Table 17 Mean scores on measures of psychological, social and physical measures across time periods by current role category

Psychological/physical health outcomes		Current ICE investigators		Former ICE investigators		No ICE experience	
		T1	T2	T1	T2	T1	T2
Quality of life	Personal wellbeing	8.25	8.30	8.25	8.38	8.20	8.66
	Life satisfaction	8.46	8.25	7.67	7.67	8.57	8.71
General mood		8.12	8.03	7.61	7.22	8.71	8.14
Psychological mindedness	Belief in benefits of discussing problems	3.03	3.09	3.10	3.14	3.02	3.27
	Access to feelings	4.27	4.34	4.50	4.04	4.29	4.00
Self-sacrifice		3.37	3.32	3.27	3.54	3.23	3.27
Post-traumatic growth	Appreciation of life	1.40	1.39	2.94	2.50	3.00	2.76
	New possibilities	1.37	1.03	2.40	1.97	1.89	1.37
	Personal strength	1.47	1.40	2.92	1.92	2.07	2.04
	Spiritual change	0.10	0.17	1.17	1.17	0.00	0.14
	Relating to others	1.01	0.77	2.02	1.55	1.98	1.49
Post-traumatic stress	Intrusive recollections	5.79	5.63	5.67	8.67	5.43	5.57
	Avoidance	8.38	7.96	8.17	10.17	9.14	7.71
	Hyperarousal	6.29	6.58	6.50	7.67	8.57	7.57
Depression, anxiety & stress	Depression	1.09	1.65	0.67	1.17	0.57	0.86
	Anxiety	0.39	0.30	0.00	0.00	0.29	0.43
	Stress	2.09	2.30	1.67	2.00	1.43	1.57
Burnout	Disengagement	2.20	2.20	2.73	2.52	2.14	2.21
	Exhaustion	2.13	2.13	2.31	2.48	2.20	2.25
Interpersonal relationships	Supportive (non-work)	3.85	3.69	3.69	3.81	3.86	3.57
	Protectiveness	1.71	1.73	1.72	1.86	2.67	2.52
	Co-worker	3.18	3.18	3.46	3.04	2.85	2.96
	Distrust of public	2.24	2.13	2.44	2.56	2.24	2.12
Psychosomatic complaints		1.57	1.55	1.61	1.77	1.82	2.02

Figure 4 Change in depression scale scores between T1 and T2 for each role category

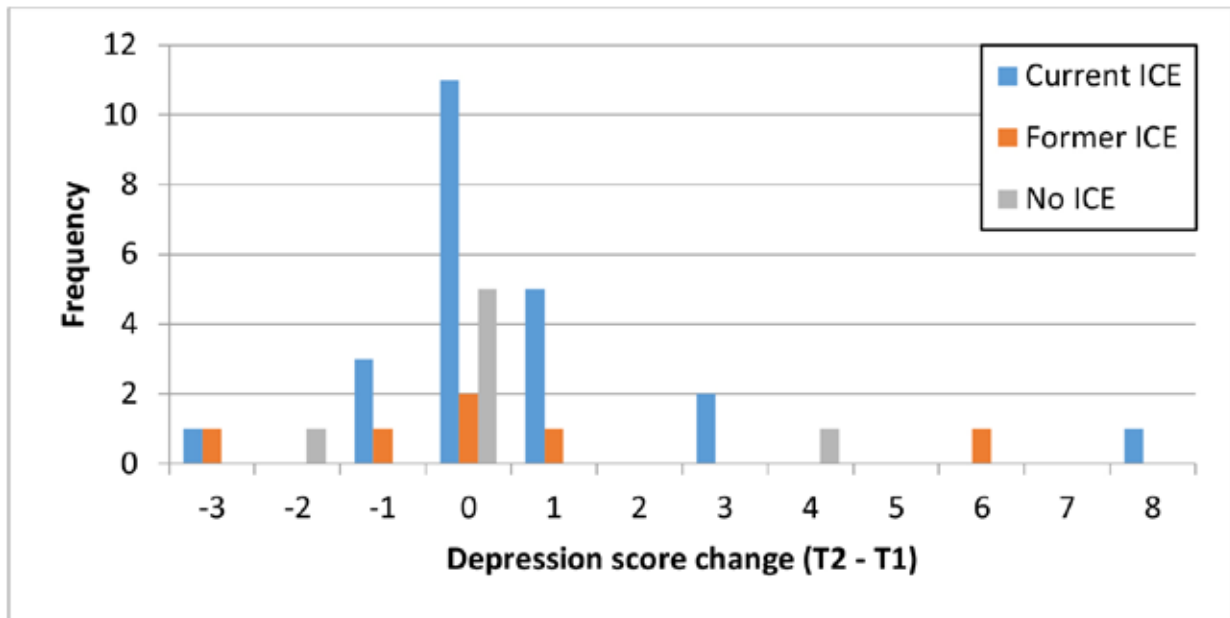


Figure 5 Change in anxiety scale scores between T1 and T2 for each role category

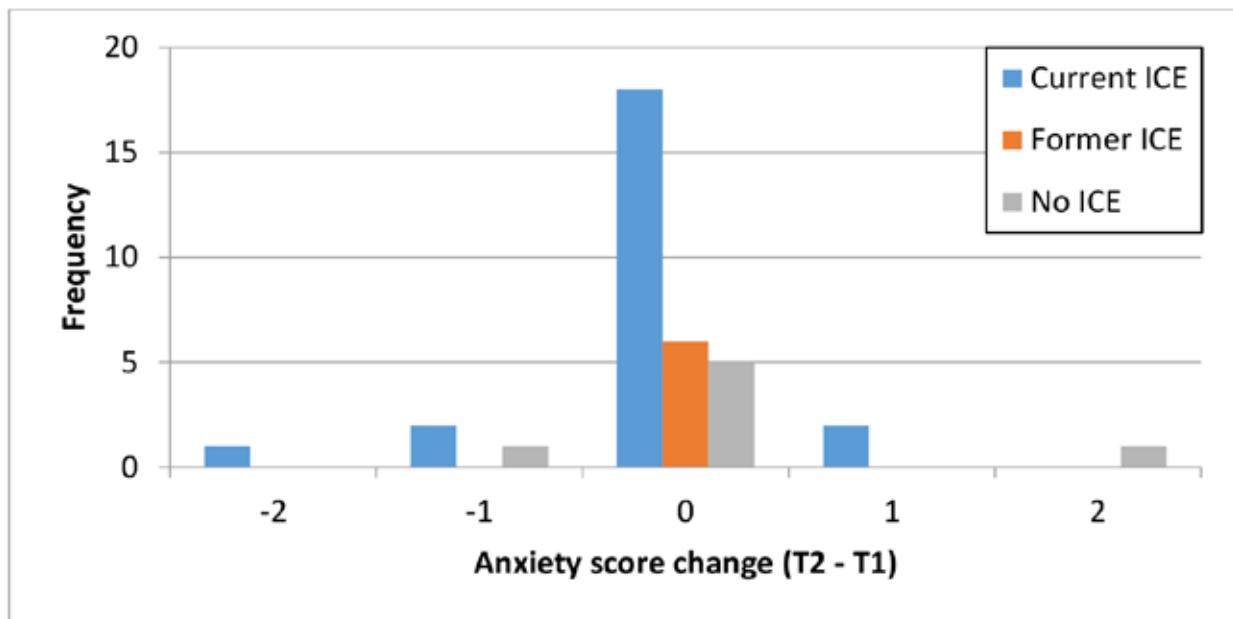


Figure 6 Change in stress scale scores between T1 and T2 for each role category

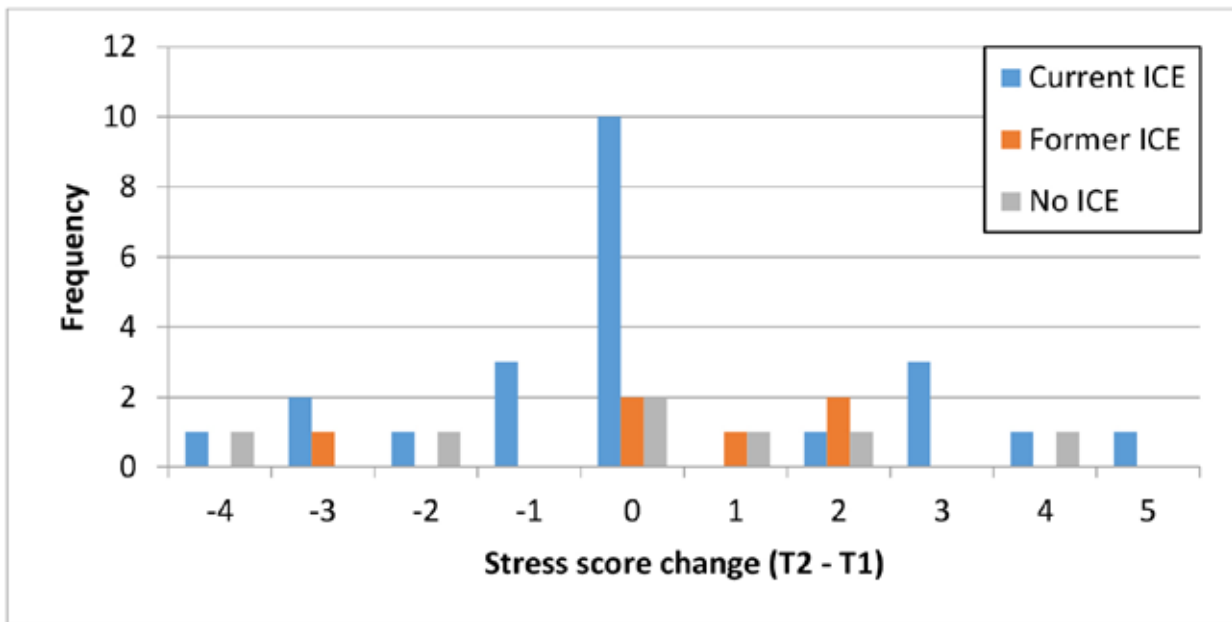


Table 18 Changes in depression, anxiety and stress clinical categories between T1 and T2 for current investigators*

Depression						Anxiety						Stress					
T1	T2					T1	T2					T1	T2				
	Norm	Mild	Mod	Sev	Ex.sev		Norm	Mild	Mod	Sev	Ex.sev		Norm	Mild	Mod	Sev	Ex.sev
Norm	20	1	-	-	-	Norm	22	-	-	-	-	Norm	21	-	1	-	-
Mild	-	1	-	-	-	Mild	-	1	-	-	-	Mild	-	1	-	-	-
Mod	-	-	-	-	1	Mod	-	-	-	-	-	Mod	-	-	-	-	-
Sev	-	-	-	-	-	Sev	-	-	-	-	-	Sev	-	-	-	-	-
Ex. Sev	-	-	-	-	-	Ex. Sev	-	-	-	-	-	Ex. Sev	-	-	-	-	-

Categories: Normal, Mild, Moderate, Severe, Extremely Severe

* 1 missing case

Changes in post-traumatic stress scores between T1 and T2 for the three groups are presented in Figure 7. Again, the majority of participants exhibited minimal change. However, one former investigator had moderate increase in score (+13) and another had a substantial increase (+28) at T2. In terms of clinical categories, the latter increase translates to a shift from a subclinical score at T1 to a clinically significant score at T2, indicating that this person reported a high level of symptomatology associated with post-traumatic stress. It is unknown whether this increase in symptoms occurred whilst this former investigator was still working in ICE investigation, afterwards, or during both periods.

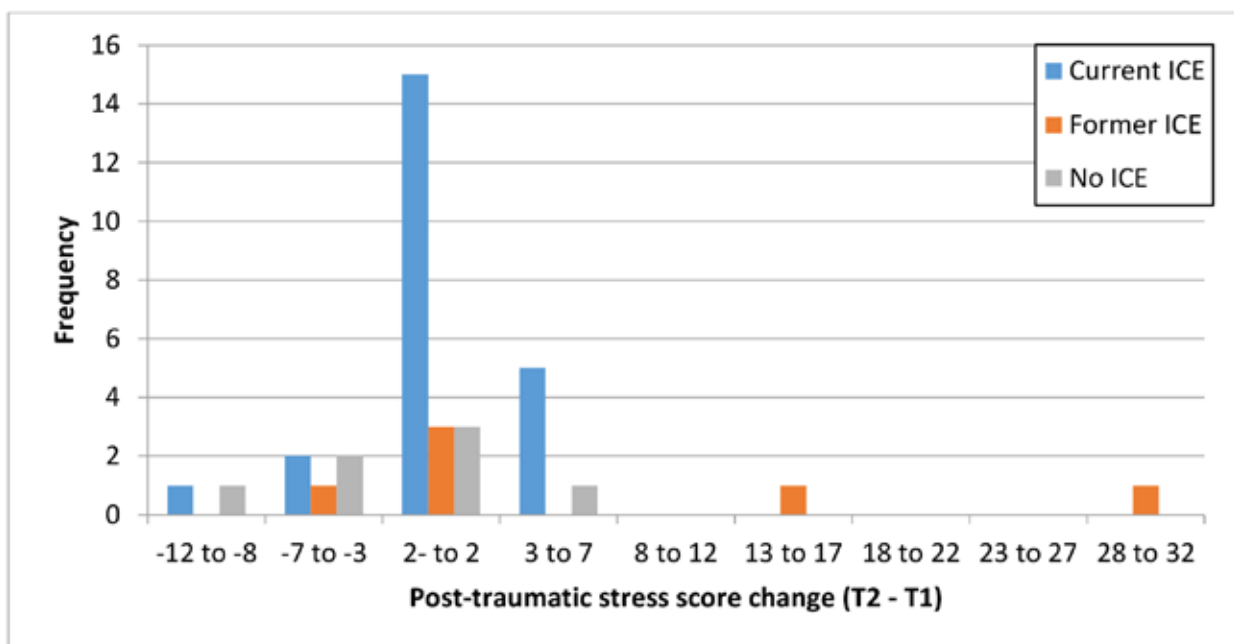
Summary of longitudinal analysis

The general pattern across the scales indicates participants' perception of, and attitudes towards their workplace and the work itself, were stable across the two data collection periods. Likewise, there were no statically significant changes in the various measures of psychological, social and physical functioning. However, three current investigators and one former investigator

reported results indicative of decreased wellbeing over the study period. Most seriously, one of the current investigators moved into the extremely severe category for depression, while the former investigator reported clinically significant levels of post-traumatic stress at T2.

The longitudinal findings are limited by the small sample size and the relatively short period between T1 and T2. Notwithstanding these qualifications, two main implications can be drawn from the findings. Firstly, participants were generally in good social, physical and psychological health. Organisations should therefore take steps to ensure the currently beneficial climate is maintained. Secondly, although ICE investigators are generally resilient, some individuals may decline in wellbeing during their tenure in ICE investigation. Therefore, attention has to be given to identifying the relatively small number of individual ICE investigators who are not coping, and who are likely to benefit from improvements to the available sources of workplace based support.

Figure 7 Change in post traumatic stress scores between T1 and T2 for each role category



Conclusions: Study 1

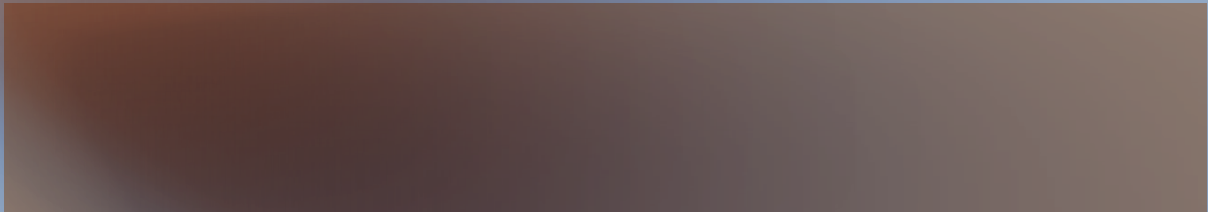
Perhaps the most significant finding from the suite of analyses described for this empirical phase of the research is the general lack of significant findings. There is little to indicate that, as a general rule, ICE investigation is associated with particularly severe psychological, social and physical outcomes. The responses of ICE investigators on a range of measures of performance and adjustment were generally similar to those of non-ICE police, and neither group on average exhibited psychological, social or physical problems that may be attributed to their potentially traumatising work roles. Likewise there were few meaningful differences in the responses of current, former and prospective ICE investigators. Additionally, symptoms of maladjustment did not increase with length of service as an ICE investigator, nor were there significant increases for the sample of ICE investigators who participated in the longitudinal study. Very few investigators reported concerns about themselves or colleagues having inappropriate responses to ICE material.

Looking at these findings more closely, we found that those investigators who were the most resilient also tended to enjoy and to be committed to their work, and to identify with and have pride in their work unit. Investigators who reflected on and shared their thoughts and feelings about their work with colleagues, and who receive support from family and friends, also tend to suffer fewer ill effects than did other investigators. Most investigators agreed that there should be regular in-house psychological evaluation of staff, but they generally did not agree with mandatory reassignment after a fixed period. They believed that maintaining a degree of emotional detachment from the victims in the ICE material, and separating their work and home life, facilitated healthy adjustment to the ICE role.

However, the findings of the study are not a reason for complacency. It is important that police organisations continue with efforts to support investigators in order to maintain the generally positive outcomes reported here. Further, against the general picture of investigator resilience, it is noted that a small number of investigators did report clinically significant levels of distress that increased over time. Procedures need be maintained to identify those individuals who are not coping and to provide additional support for them.

We also acknowledge some methodological limitations of the current study. One issue is the small number of participants in some of the subgroups, the main effect of which would be to reduce the power of the statistical analyses to identify differences among groups. In addition, while the quantitative method employed here has provided a wealth of data that allow us to identify general trends in the sample, it is limited in the extent to which it can uncover the underlying experiences and motivations of individual participants. In order to gain further insights into the impacts of ICE investigation, we turn to qualitative research in Study 2.

Study 2: Interviews



Study 2: Interviews

Method

Participants

The sample consisted of 32 participants, who were either current (n = 28) or former (n = 4) ICE investigators. There were 22 males and 10 females. All nine Australian police jurisdictions were represented. Tenure of employment with a police organisation ranged from 4 to 34 years (M = 15.60 years). Tenure in ICE investigation ranged between 1 and 25 years (M = 5.02 years). The sample included 3 computer analysts, 23 detectives and sworn police of various ranks, 4 ICE supervisors and 2 trainers. Two participants were unsworn employees.

Interview schedule

Interviews focused on three broad themes; general sources of stress, sources of resilience (identification of coping strategies and sources of support) and engagement with ICE material as a specific source of stress and the coping strategies and available sources of support used to lessen any adverse impact related specifically to ICE material. A two-phased semi-structured interview schedule was used. Initially

participants were invited to talk about their current role (as a police officer) and how they came to be involved in ICE investigation. Former ICE investigators were asked their reasons for leaving. The second questioning phase focused on eliciting an overview of the officers' work situation (i.e., tasks performed, personal behaviours and perceptions, work structures and organisational support). When stressors or challenges were reported, participants were encouraged to elaborate on how the work arrangements (if at all) affected their ability to perform ICE investigation. Participants also asked to comment on whether they would recommend their role to someone else and what the ideal applicant would look like. They were then invited to talk about their subjective experience of working in the area of ICE investigation and to discuss their personal and organisational coping strategies in the workplace. When strategies were reported, participants were encouraged to elaborate on how effective these were (if at all) and how the strategies facilitated or inhibited their ability to perform ICE

investigation. ICE investigators who indicated that they or others had not coped in the past, or who were not currently coping, were asked to elaborate on the reasons and the signs of non-coping. Participants were also asked to talk about the actual case material they dealt with on a daily basis, elaborating on their subjective experience (influence on health, relationships both personal and professional including with children) and the existence and efficacy of personal and organisational support.

Finally, participants were asked to discuss a particularly salient case that the participant had dealt with personally or had heard discussed by other investigators. The focus in this line of questioning was on the adverse physical or psychological reactions, the longevity of any reactions, and what it was about this particular case that made it especially impactful (for example text or video or audio material, presence of violence, victim age, relationship between perpetrator and victim or a resemblance between the victim and someone known to the investigator).

Note that the interviewers were largely passive participants, asking only broad open-ended questions to encourage further elaboration and to seek clarification. Importantly, the interviewer did not presume that the participants faced challenges from any particular facet of their work or that ICE investigation had a negative impact on psychological wellbeing.

Procedure and data coding

The 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 on to 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. Anonymity was assured by the creation of an individual identification code using the formula described in the quantitative procedure section. All interviews were administered by research academics in our team. These interviews averaged 58 minutes in duration (range: 28 to 132 minutes), and were conducted between the months of February 2011 and February 2012.

All interviews were audiotaped, transcribed verbatim and double-checked for accuracy. The interview data were organised, coded and analysed using principles of grounded theory⁶⁸. That is, the themes were inductively derived and grounded within the dataset. Integral to the grounded theory approach, data collection and analysis occurred simultaneously. Soon after each interview was

conducted, the interview was transcribed and coded for key themes. The coding process was collaborative in nature: two of the researchers independently read all of the interview transcripts and then met to identify common themes, to develop a coding protocol, and to discuss new areas of interest which could be followed up in subsequent interviews. Such discussions aided in refining the coding protocol to ensure that it adequately captured the content of the interviews. 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

The qualitative results will be presented in three sections: 1) sources of stress within the participant's work role and environment; 2) coping and sources of resilience (identification of coping strategies and sources of support); and, 3) exposure to ICE material as a specific source of stress and the coping strategies and available sources of support used to lessen any adverse impact related specifically to ICE material.

1. Stressors

The interviews highlighted that there are many challenges and stressors associated with ICE investigation. Interestingly, viewing material was not singled out as a workplace stressor or especially traumatic facet of the work environment. While the officers acknowledged that this work was not suitable for everyone, none appeared openly distressed or expressed current difficulties associated with viewing the material⁶⁹. The officers perceived that viewing ICE material was an integral work task. It was the other workplace stressors that impeded their ability to get the job done. When describing the workplace challenges, there was little indication of personal grievances, nor a sense that the participants were approaching this interview from an anti-organisational position. Rather, they reflected concern that these factors impeded their ability to perform the important job they were employed to do. The challenges were addressed under three broad themes: *work relationships*, *workload and resources*, and *the physical environment*. Issues related to each of these themes are now discussed in turn.

Work relationships

Interpersonal relationships represented the primary workplace challenge. The majority of the interviews focused on this issue. It was often raised early in the interview and without prompting. Although cases were assigned to individuals and pursued independently by officers, teamwork was reported to be integral to an officer's ability to cope with various sources of stress. Specifically, the team supported individuals by providing informal debriefing, sharing workload, peer monitoring (informal social support), and sharing of expertise (i.e., diverse skills are necessary given the areas of technical expertise that must be integrated to perform this job). Further, relationships with immediate peers boosted investigators' morale by providing a chance to communicate with others who shared and understood their work experiences. When group cohesion was low and there was reason for dissension within the group, this reportedly impeded work performance and stress levels increased significantly.

Textbox 1: Interview quotes about work teams

"Having a close team makes it easier to deal with the sorts of issues that you need to deal with. It just gives you people that are going through the same sorts of things; people you can associate with and that helps."

"A lot of it comes down to team dynamics. I suppose that's true with any organisation – no matter what the task is it comes down to the individuals and how they interact with each other. At the moment it's quite good; everybody's got a positive attitude to the work and that really helps in terms of the issues we face. But there have been times when it's not been ideal. That's due to a myriad of reasons; different personalities, different agendas of people, etcetera."

The personality and competence of the team leader was perceived as particularly important. In addition to being an important source of social support (as with other co-workers), team leaders play an additional role as they dictate the structure in which the team works. Misunderstandings regarding the nature of the work, the realities of how long it takes to complete jobs and the needs of the team can introduce a source of tension. The optimal team leader was described as an integral member of the team. They care about team members, value the work, understand the technical and emotional demands of the job (to enable them to allocate work effectively), are

approachable and proactive in providing the administrative structure that assist job performance (without micromanagement), are willing to access additional staff and provide resources where needed (e.g., employer assistance program) to address the team's needs. Effective communication, confidentiality in relation to personal issues, allowing flexibility in the work environment, reasonable workload allocation and providing feedback about case outcomes were deemed to be important behaviours and attributes of team leaders.

Textbox 2: Interview quotes about team leaders/supervisors (part 1)

"It's mentally draining for me to work where I work and then have to constantly justify my actions to bosses who don't understand what I do. That leads to a lot of angst. Having to constantly go and explain everything drains you. The organisation's ability to comprehend the amount of work I do has more impact than the fact I am looking at child exploitation material."

"My team leader's personality is fantastic. In saying that, he's not touchy-feely – it's not a requirement to be an emotionally sensitive person. But he is very observant, very honest with people, provides people with both positive and negative feedback, and he doesn't give people any false impressions of their ability to do the job. His ability to do that assists the emotional climate within the unit."

"My detective sergeant [supervisor] is very, very switched on and is generally across everyone's workload. That's what it comes down to – how quick your sergeant is aware of what his troops' workload is. We've got investigation spread sheets that are regularly updated, showing where everyone is at. But occasionally we get enquiries from other areas which are not in the spread sheet but require time – assisting interstate police, particularly with extraterritorial warrants, showing interstate police exhibits. There is lots of red tape to get through which can tie people up for hours and days. So if the sergeant's not paying attention to what's going on, then you can be working feverishly trying to get enquiries for interstate police done and he's allocating investigations to you and you'll say, 'Hang on I can't do this,' and then it will turn into an argument and heated situation."

Several participants described team leaders who appeared unconcerned with any issue apart from budget and their own standing within the organisational hierarchy. These team leaders were reported to be 'too damaged by police culture' to be effective in their role. A commonly expressed opinion was that ICE teams would benefit from supervisors undertaking some case work; case work reduces supervisors' ambivalence by providing insight into the technical and emotional demands of the job and enhances investigator-supervisor connectedness.

Textbox 3: Interview quote about team leaders/supervisors (part 2)

"There'd be days where everything is going really smoothly and everybody is getting along. But there'd be other days where it's an absolute collision course, where people are just going at each other for no apparent reason because of the stress we're put under by management. There are so many steps to getting one of those jobs ready to go. You're viewing images while juggling other tasks, running at this really high mileage all the time and all [management] keep saying is, 'Right, when are we going to do that job? Get that job ready. Is that job ready?' They've got no idea that we're moving as fast as we possibly can."

High staff turnover was perceived to hamper the ability to form strong and effective workplace relationships. This is because the ability to offer support and to be proactive in identifying other team members' needs depends on trust and a good understanding of the way in which others normally related, coped with and displayed stress. Such relationships take time to develop. When team leaders are replaced frequently, the change in work structure and team dynamics creates a major burden for staff and removes an important avenue of support.

Textbox 4: Interview quote about staff turnover

"A lot will come down to the stability of the people who run the crew. As a person who's been in the unit for a long time, I wouldn't go to the sergeant who has just taken over my crew and say I've got a problem because I don't know what reaction I'll get when I speak to him. The modern police force, certainly in criminal investigations, disadvantages you if you want to stay in the one spot too long. That's why you get a massive turnover of people and as a result less trust in the people you work with."

Finally, relationships with professionals who are external to ICE units provided a major challenge and potential source of stress. Given that the distribution of ICE material crosses jurisdictional boundaries, investigators' jobs depend on the cooperation, expertise and support of professionals in other jurisdictions who have the authority to arrest offenders, intercept or prevent on-going distribution, and access potentially important evidential information. Sources of stress relating to this form of collaboration arose from: (a) time delays in responses or actions; (b) misunderstandings and conflicts arising from different laws, priorities and procedures; and, (c) ambiguous guidelines.

Textbox 5: Interview quotes about working with international jurisdictions

"The Internet is a global situation so we don't always have jurisdiction of the websites that we come across. If a website is hosted in Russia then we have to go via Interpol to Russia to try and get it taken down. It's a slow process and unfortunately it's not always possible to eradicate material."

"I deal with a lot of international referrals, like in the last month I've sent about 15 convictions internationally. It might be only after you've chatted to a sex offender for a while online that you realise – hello – this person is actually in Italy or the U.S. You can't just write the matter off because often there are children at risk. So we then have to do up an investigation package and forward it internationally. These packages take up a lot of your time and are quite challenging."

ICE investigation also involves interaction with prosecutors and the judicial system. For example, as part of the trial process, ICE investigators must be present (if requested) while legal professionals view the ICE material. Further, legal professionals dictate the time schedules and work volume in terms of the number of images that need to be classified and in what form it needs to be presented to the court. The stress arising from the requirement to collaborate with the legal professionals is more than a workload issue. The collaboration generates conflict because it requires subordination and acceptance of demands that are perceived by ICE members to be unreasonable. Further, conflict arises when decisions not to proceed with prosecution and the sentences awarded by judges do not (in ICE investigators minds) reflect the quality of evidence produced or the amount of work that had been put in to the case.

Textbox 6: Interview quotes about judicial processes

“When I think back to the worst case I’ve experienced, there was no adverse reaction to it other than the fact that there was an extremely lenient sentence at the end of it. This affected me more than anything else. I was so annoyed and disappointed that it took us longer to do the job than the person actually got as a sentence. The job was so big it took over 6 months and set a precedent for our jurisdiction in terms of the quantity of images and the extreme lengths that were taken to get and distribute the material and become part of online groups and networks. It was phenomenal the amount of work that these people [offenders] had done and the amount of work we did tracking them down. To get such a lenient sentence was just horrendous. That affected me more than anything else.”

“When you put all the efforts into presenting an air-tight case before a prosecuting authority and then at the end of it the accused gets a \$50 fine it’s really disheartening.”

Workload and resources

ICE investigation is a complex process requiring an integration of many separate tasks performed by people with different skill sets. This area of investigation involves (at least in part) accessing, preserving, collating and presenting evidence in a form that meets legal requirements (including categorising images), proactively engaging with offenders online through

covert operations, giving evidence in court, liaising with victims and addressing queries and concerns from the public, executing search warrants, special operations and making arrests, writing reports and attending viewings and trials. When material is initially identified, the investigative response must be swift and must comply with the demands of the court. The issue of workload was brought up spontaneously by every participant and usually in a negative context. Issues related to the volume of work and the insufficient time and resources available to do each case. Long work hours were seen as necessary and a consistent source of strain.

Textbox 7: Interview quotes about workload

“The time restraints, compounded with the amount of different jobs and investigations that are running at any one time, makes the job difficult. You might be looking at child exploitation material in the morning for three hours and because of the workload you can’t then go and take a couple of hours to just be by yourself, have a coffee somewhere and make sure you’re feeling happy. You have to go straight to a crime scene or to interview a young kid who’s been sexually abused. It’s the time restraint and workload that causes the stress.”

Within the interviews, the participants identified three factors that had, or could potentially increase, efficiency, reduce individual workload, and enhance officers’ perception of organisational support. The first factor mentioned was computer technology. Participants referred to the importance of having up-to-date computer hardware, in order to back up large volumes of material and keep up with the speed and ease with which ICE material was being distributed and accessed. Further, officers referred to the existence of software which automatically scans a library of images and identifies previously graded material, thereby reducing double handling of evidence (i.e. the need for officers to view and grade material that had previously been identified and graded by themselves or others). All officers were aware of the software but many did not have access to it.

Textbox 8: Interview quotes about technological resources

“Basically you push all your images into the database and it’ll spit you out a report that says ‘1000 of the 3000 images that you provided have already been identified as child pornography and this is the category of the child pornography. Then we can just hand that report straight to the prosecutor and say ‘this clown’s got 1000 known child porn images that are classified as blah’ and we don’t even have to look at them. All we have to do is plug computers in and it basically does it for us. Eventually down the track 85% of all child porn images floating around on the Internet will be classified and we won’t end up having to look at too many.”

“We’ve done jobs where the bad guys are using more computers than we have – jobs where we’ve taken 35 terabytes of storage away. We don’t have 35 terabytes in our server! I mean we just can’t back that up. We’ve stopped backing up a tape because it’s too expensive – \$50 to back up 800 gig and you’re putting through 30 or 40 terabytes a month. They [management] just stopped buying the tapes.”

The second workload-related factor was staffing adequacy. All except two participants felt that staff numbers were not adequate to meet the available workload at any given time. This was seen to be due to inadequate recruitment of ICE staff, incompetency of some staff (due to insufficient training or experience), the frequent secondment of ICE staff temporarily to other policing duties and some staff actively avoiding certain aspects of the job (e.g. not wanting to categorise certain types of traumatic case material). Thus, participants reported that increasing staff would not reduce workload and stress unless the staff recruited had the appropriate knowledge, skills and abilities to do the work. Poor staff competency creates more work for others because it leads to errors that require correction as well constant supervision and training which takes time.

Textbox 9: Interview quote about staff recruitment

“Recruiting people straight out of university who don’t have forensic experience does not solve the staffing problem. No matter how geek they are, they need experience. It could take 18 months for them to get their head around how you do a forensic examination. I spend half my day training these people!”

Limitations in completing image grading work were due to the nature of the task as well as competency. However, when it came to the more objective procedures and skills, the issue of formal training was very much entwined with workload. Most officers said they were expected to learn on the job with no formal instruction, and when formal training was available it was often restricted to one investigator who was subsequently expected to take on extra duties in the form of training colleagues or absorbing specialised duties which utilised the newly learned skills. The ad hoc and informal in-house nature of training was not only seen to be inappropriate but also denied other members of the team formally recognised qualifications.

Textbox 10: Interview quotes about training

“There’s definitely a big hole in training in relation to investigating and analysing, and managing exposure to, child exploitation material. When I did my first investigation I had to just work out myself how best to do it and I made mistakes because there weren’t clear policies or procedures. Inadequate training caused me to be exposed to the material more than I needed to be as I found myself revisiting material to fix up mistakes that I had made.”

“Trying to keep all the team up to speed and do individual training sessions would be almost impossible. On the most recent course, we just sent the analyst. He’s the one who is accessing most of the material on the websites. He can either train up the other members or if they had a specific task requiring the expertise, they can just give it to him and he’ll handle it.”

The third workload-related factor related to the perceived inappropriateness of certain job requests. Examples included ICE team members having to carry out other (unrelated) policing duties (e.g., security work at a festival), investigators performing ICE-related administrative duties which could be delegated to less specialised staff, and investigators having to view and categorise every individual item of material when (from the investigator’s point of view) a representative sample of categorised images would suffice.

Textbox 11: Interview quotes about procedural frustration

"We need to be able to say to the court 'Here's a fibre optic. Connect to our server. We're not going to give you a printed piece of paper'. This is the problem the court is having at the moment. They want things printed off and are not understanding when I say to them, 'The reason I've given it to you on a DVD is that there is 2.4 million pages and if you print it you will kill trees, so here it is on DVD'."

"One of the things that makes the cases so weighty for us is that the courts wants us do a complete examination. Rather than compile evidence for a representative proportion, they want us to say, 'There were 120,000 child exploitation material, 50 of which were penetrative adult on child, 20,000 were just posing. 10,000 were this category, 15,000 was that category and he also had 340,000 normal pornography images'. There's seven grades now so the investigators have to go through every single image and give it a grading or a categorisation. Further, for each child exploitation image we need to say, 'It came from this website, it was downloaded on this date, it was accessed by the bad guy on this day and it was still sitting in this folder over here when the detectives turned up'. You just can't do that with every image. We've got a guy in our office at the moment going through 500,000 images."

"The absence of clear policies and guidelines around the preparation of evidence leads to a lot of arguments and to-ing and fro-ing between our management and the prosecutors about how things should be done. Sometimes that causes us to have to do things a number of times."

Collectively, the inadequate funding allocated to ICE investigation, the seemingly unnecessary nature of some of the tasks and the modest salaries (relative to what these professionals could be earning in private industry) resulted in officers feeling that their skills were under-valued and unappreciated by management. Resourcing was directly linked to worker morale.

Textbox 12: Interview quotes about feeling unappreciated and under-resourced

"There are other areas within my organisation that are funded and promoted far more seriously than we are because it's the flavour of the month, political bikies – drugs and organised crime. When you talk about the dissemination of child exploitation material that's as organised as any drug cartel anywhere in the world... but it's just not looked upon the same way."

"People aren't happy about the pay. We're a highly specialist IT unit but we're getting paid less than generic IT people within our organisation. Yeah there is a slight difference between the police and the civilian wages because they have to work shifts whereas the civilians don't work shifts, and there are different pay levels between sworn and unsworn, but within our own organisation, the forensic accountants start on about \$20,000 more than what we start on. So that creates a bit of tension in terms of people's happiness working in the organisation but the actual work itself doesn't deter people."

"I think there's a lot of frustration not necessarily because of the content of the work but other crime areas' attitude towards what we do. They treat our crew, I believe, as the poor cousins. That's an issue for the bosses because it's a problematic area that they have to constantly address. I think that in the scheme of things, child pornography and what we do is probably last on the priority list."

"The aspect of work that I found most difficult to deal with had nothing to do with dealing with child abuse victims or dealing with exposure to child exploitation material. It was the lack of resources."

The stress arising from limited resources was compounded by the knowledge that the offences investigated and prosecuted are just the 'tip of the iceberg'.

Textbox 13: Interview quote about the outcomes of ICE investigations

"I just do the best that I can with my two hands in my job. Given our limited resources I can't think too much about what we need to combat on a global scale. With my six blokes we're lucky to arrest 30 per year but there's probably 3,000 operating on a daily basis. If you were to think bigger picture, you wouldn't be able to cope because we're not winning this battle."

Physical environment

The majority of police members reported that their physical work environment was not ideally set up for ICE investigation. A common concern was the unsuitability of completely open-plan workspaces. An open-plan workplace was viewed, in part, as advantageous because it facilitated debriefing and engagement between staff which was necessary to prevent a potentially debilitating sense of isolation. However some tasks were seen as better performed within a private space. For example, the material was sometimes so graphic and abhorrent that it was not appropriate to expose staff members who were not directly involved in the case. Sometimes the need arose to telephone suspects in a covert investigation (e.g., pretending to be a victim) and this required the absence of background noise and distraction. Sometimes the need arose for individual staff to have an impromptu confidential conversation with the supervisor. An easily accessible, sound proof, restricted access, dual purpose viewing-meeting room was the suggested solution.

Textbox 14: Interview quotes about the work environment (part 1)

"There's a Catch-22 dilemma when you're examining child exploitation images. On the one hand you want to limit exposure [of images] to as few people as possible. On the other hand, if a person sits for long hours in isolation, that's quite detrimental to the longevity of that person's ability to do this job in a healthy manner. You need to be able to re-engage at any time with your colleagues. Being able to look up from the computer and see people around is beneficial in this environment."

"To conduct online investigations properly, in the perfect world, you'd have 20 computers all set up in this lovely room where the computers are back to back and everyone's within sharing distance of each other, but you also have separate rooms where you can quickly run off with a mobile phone to talk to a particular person. I can tell you that all these people [offenders] want to make over-the-phone contact as soon as possible. Once they've initiated some sort of rapport with what they think is a child, they always want to speak to the child, so you have to have people who can purport to be a child on a phone fairly rapidly and sincerely and not give the game away so to speak. You need soundproof rooms because if you're supposed to be in a bedroom, you can't have a copper's gurgling, coughing, telling jokes in the background. You have to have a private soundproof room."

Another benefit of having a separate meeting room is that it would allow forensic analysts and other ICE related staff (who were not located in the same unit as the investigators) to examine the material in a secure distraction free environment. Currently, there was lack of dedicated space with adequate facilities for professionals from different units to meet.

Textbox 15: Interview quote about work facilities

"When it comes to viewing material, it always has to happen at the electronic crime area, so we leave our office and go to their office because obviously they have to set the computers up in a secure way and then remove all of the data from it so we can view it. So they'd say, 'Oh so-and-so isn't here just now, so you can sit there'. And you'd be sitting at someone else's work station, viewing the images then when that person's shift starts you have to move and set everything up at a different desk and then that person would come in and you have to move all over again."

A final issue related to the physical work environment was comfort. Common concerns included poor ventilation and excessive ambient heat emanating from the computers, cramped and overcrowded workspaces, lack of natural light, and furniture that was not ergonomically suitable for long hours of sitting. Officers reported that these work conditions not only reduced productivity, they presented significant occupational health and safety risks.

Textbox 16: Interview quotes about the work environment (part 2)

“The worst thing about [doing ICE work] is we don’t have any windows or doors, no light. It’s like the bat caves! They’ve tucked us away in this big building and unfortunately we’re sort of in the middle of the building and honestly you wouldn’t know if it’s rain or sunshine or night or day outside. I think when you’re dealing with this sort of material and your job is to sit in front of a computer and engage these people it would be nice to have a window where you could just look outside and see people walking across the street or whatever rather than just be trapped in this sort of dungeon-type environment.”

“We get all the work done and we do what we have to with what we’ve got. But a better work environment would bring immediate benefits, there’s no doubt about it. No one seems to take it very seriously.”

Summary of stressors

Participants described numerous daily work challenges and stressors in ICE investigation. Exposure to ICE material was not perceived to be a particularly significant source of negative workplace stress. Three sources of stress were identified which included; work relationships, resources and physical environment.

Workplace relationships were considered a pivotal factor related to stress and difficulties in participants’ work role. Lack of positivity, poor team cohesion and co-worker incompetence were reported as notable stressors, as was having unsupportive supervisors. Working with external bodies, particularly international jurisdictions, was considered a source of frustration. Furthermore, some judicial processes were considered challenging and/or disheartening for ICE investigators (e.g., lenient sentences for offenders after intensive investigation).

Workload was universally identified as a major stressor by participants. Time constraints and job demands were described as, at times, being excessive and unrealistic. Having sufficient technological resources and facilities, and appropriate staffing levels to manage the workload were reported as crucial to efficient ICE investigation. Additionally, participants stated that recruiting inexperienced staff and having inadequate training for existing staff have been sources of stress. Procedural frustrations were also expressed when dealing with prosecutors and courts (e.g., unreasonable requests, unclear or inefficient procedures). Participants reported

at times feeling unappreciated in their role as an ICE investigator, reflected in their unit’s funding, pay levels, respect from others and insufficient resources. It was also expressed that knowing ICE investigation only leads to the prosecution of a small proportion of offenders compounded any stress associated with the role.

The physical work environment was also described as a source of stress, in the respect that it can adversely affect worker morale and wellbeing, and may not be conducive to efficient investigation and viewing of material, and high job performance.

2. Coping and resilience

Overall, the participants (as a group) reported to be coping with ICE investigation. Out of the 32 participants interviewed for this study, 30 indicated that ICE work was not currently having a negative impact on their mental health. This was evident not only by the participants’ comments about their own mental health, but from the fact that 31 of the participants said they would recommend the work to others. However, as a group, the participants recognised that resilience levels did vary within individuals over time and across individuals. Four of the 30 participants who reported negligible current impact from the work indicated that there had been periods during their past employment as an ICE investigator where they had temporarily experienced difficulties. Further, 7 of these 30 participants stated that they knew of colleagues who had apparently left ICE work due to the nature of the material or general organisational stressors.

Textbox 17: Interview quote about co-workers adversely affected by exposure to ICE material

“Some people are able to be exposed and can continue to do the job and some people can’t. I know of people who became a victim to the [ICE] material, developing a negative outlook on the world and their own position. Eventually they were assessed and it was concluded it wasn’t safe to continue within the ICE environment.”

Of the two participants who indicated that their job impacted their own mental health, one of these had already left the ICE unit⁷⁰, subsequent to being diagnosed with a psychological condition. His personal account (detailing the event which led him to acknowledge his need for help) illustrates the insidious manner in which ICE investigation can undermine investigator wellbeing.

Textbox 18: Interview quote about adverse effects of ICE investigation (part 1)

"I couldn't see it in myself. I thought I was going along fine. What made me realise I had a problem was that I was becoming over-emotional about issues that I shouldn't become over-emotional about. The trigger was a news report about a soldier being killed – I nearly burst into tears over that. That's when I realized I had a problem because, while it's a sad story, it's not something I would normally cry about. As soon as that happened I made an appointment to see my GP."

The other officer who reported experiencing work-related psychological difficulties was still currently engaged in ICE investigation, stating that his work colleagues were not aware of his vulnerability. Interestingly, he did not regard exposure to ICE material as a major factor in determining his current state of wellbeing; rather, he attributed causality to general workplace stressors such as excessive workload.

Textbox 19: Interview quote about adverse effects of ICE investigation (part 2)

"If anyone asked me, 'Does it affect you?', I'd say, 'No, not at all'. In part that's because I'm still not sure if and how I'm affected. The signs are probably there, but I'm not tuned into them. The child exploitation material is not the worst thing I do. It's all the other daily stresses from this type of work which have an impact and I guess I'm not being as happy and joyful as I would be if I wasn't exposed to it. I believe I find it harder to be happy. You start thinking of questions of depression and things like and at home your wife starts noticing you've been drinking heavily. You then think, 'Shit, I wasn't doing this before. Why am I doing it now?' I didn't feel like there were as many effects but I think it builds up and builds up."

Irrespective of whether participants felt they were coping, variability in resilience to ICE investigation was attributed by the participants to the effectiveness of individual or organisational coping strategies and to background factors. It was perceived that certain individual characteristics made a person more or less suitable for the job. The remainder of the results section elaborates on these issues using the following headings: selection of ideal applicants, indicators of poor coping, and coping strategies.

Selection of ideal applicants

When asked to describe the ideal applicant for ICE investigation, most participants highlighted a background in criminal investigation and computer literacy because these factors imply greater task competence. Further, individuals with previous exposure to sex crime investigations were perceived to be ideal because these applicants (having already been 'scarred' by the material) would have developed a repertoire of effective coping mechanisms and would be aware of the complex nature of these offences.

Textbox 20: Interview quote about technical proficiencies of an ideal ICE investigator

"The best person for the job is somebody with a strong IT background and who's worked as an investigator in child protection, so they are already scarred by it... It's got nothing to do with what academic qualifications. First and foremost you've got to be an investigator. But you also need strong internet and Google skills so you can find quick solutions to things you can't answer off the top of your head."

In addition to task related experience, all participants referred to personal characteristics. In summary, the ideal ICE applicant was described as follows: intrinsically motivated to stop ICE offences, emotionally stable (e.g., robust, even tempered, and not neurotic, overly reactive or prone to anger), having the ability to easily disengage (e.g., separate work from home life, and maintain a degree of personal distance from the material), a problem solver (lateral thinker), articulate (particularly in communicating needs to management), realistic about the job requirements and one's own capacity to meet those requirements, and having professional and personal integrity.

Textbox 21: Interview quotes about personal characteristics of an ideal ICE investigator (part 1)

“We look for a fairly robust individual – an investigator who can think laterally but is not going to personalise an investigation in terms of taking it home with them. It’s important to separate work from home.”

“Ninety per cent of our time we’re working on our own so we need experienced, trustworthy, motivated team members who can work without supervision. If people can’t stay focused, the work gets behind very quickly. The ideal applicant is also someone who is calm, has a lot of world experience and is able to articulate clearly what they need when speaking to management because management really don’t understand what we do. Also if you’re someone who gets easily upset with things you might see, this work is not for you.”

Further, abilities to develop rapport with, understand and empathise with others were seen as valuable qualities in ICE investigators. The rationale was that these qualities underpinned the development of close bonds with colleagues, effective offender engagement (which was crucial for the elicitation of information during offender interviews) and the pre-empting of offender behaviour during the investigation process.

Textbox 22: Interview quote about personal characteristics of an ideal ICE investigator (part 2)

“The ideal ICE employee is non-aggressive, even tempered and somebody who’s got an eye on the goal, which is to get the evidence against offenders. We don’t want crusaders or people who easily explode or get aggressive. Often when you’re talking to child sex offenders you’re trying to build rapport and get their confidence. They’re not going to talk to a big burly detective who is aggressive and who judges and insults them. ICE offenders have to be treated differently to most other offenders.”

With regard to the development of rapport with colleagues, a sense of humour was considered essential (the reason for this appears later in the results). Gender was not considered by the vast majority of participants to be a relevant factor in determining the ideal ICE investigator. Only three participants referred to this demographic factor, reporting that it was relevant to an individual’s ability to deal with the horror of ICE material. However, among those three investigators, bias was displayed in favour of both male and female investigators.

Textbox 23: Interview quotes about personal characteristics of an ideal ICE investigator (part 3)

“Men, by nature, are better equipped to deal with the material that we look at.”

“In some ways this work is dangerous for men. I think on some odd level it’s easier for women to separate themselves out from the behaviour. Because they aren’t watching women do it, they’re not identifying in any way, shape or form with the perpetrator. If you’re going to be in this area, you’re going to be watching adult men doing things to children and if you’re an adult man, on some level you’re going to ask yourself ‘Well how come he’s doing this? Will this affect me? How will this get in my head? What does this say about men?’ There will be some kind of questioning.”

Participants openly described the pre-employment selection process offered by their organisations, which typically included a psychological evaluation (e.g., tests of personality and mathematical ability) and a detailed written application. While they acknowledged that pre-employment selection was important, the majority felt that a more longitudinal and multi-faceted selection process was needed in order to best align the right candidates with the complex job demands. Interviewing of candidates was deemed important to understand the candidates’ motivations, personal background, and reactions to any past stressful experiences including exposure to child exploitation material. Referee reports were considered a useful addition to the interview, as well as having the applicants attend pre-employment information sessions (including informal meetings with current ICE investigators) to ensure any acceptance of the position was an informed choice (i.e., they knew exactly what the job involved and its potential impact on them). Although the job could be rewarding, several ICE investigators we

interviewed highlighted that there were practical issues to consider. For example, having young children and a poor state of health were deemed to increase the risk of traumatisation arising from the job. Another consideration for career-minded candidates is that experience in an ICE unit was deemed unlikely to enhance an investigator's case for promotion.

In addition to rigorous pre-selection, several participants suggested that a 3-month probation period for incoming employees was needed for the employee and employer to make an accurate assessment of the candidate's suitability. The probation period would allow time for the development and application of personal coping and practical job-related skills which are intricately entwined with the decision to continue employment. While all participants who raised the issue of probation attested to its utility, some felt the assessment of resilience needed to be on-going. It was considered unlikely that a brief selection or probation process would be comprehensive enough to infallibly discriminate those with the greatest resilience from those with the least.

Textbox 24: Interview quote about identifying suitable ICE investigators

"A lot of people might appear suitable for this role and then six months into the job you're thinking, 'Oh they definitely shouldn't have come here.' You can think you know somebody and then when you work with them for a while you realise you didn't really know them at all."

Indicators of poor coping

Most participants found it easy to generate descriptions of ICE investigators who were not coping in their job. Overall, according to participants who generated these descriptions, there were two categories of indicators that signified that an investigator was not coping or was starting to become overwhelmed: the first category was avoidance of work tasks and the second was personal changes. Avoidance of work tasks included absenteeism, a reluctance to take on new casework or to view material, and sloppy paperwork. ICE investigators who engaged in these avoidance behaviours reportedly used workload as the excuse. The second category, personal changes, referred to a change in behaviour, personality or physical appearance with no alternate explanation. These changes include increased displays of negative affect (e.g., aggression, irritability, anxiety, fatigue,

impatience, teariness) and becoming socially withdrawn. Physical changes include noticeable weight loss or gain, a dishevelled appearance and looking fatigued.

Some participants believed that diminished coping would be easily identified by oneself, colleagues or supervisors, while others vehemently disagreed. There were three explanations given to support that diminished coping was difficult to identify. First, when ICE investigators work on a case in isolation, there is little opportunity for colleagues to monitor warning signs. Second, some individuals are quite adept at hiding stress, and police culture, in particular, discourages open expressions of vulnerability. Third, changes are not always obvious or acute; they are usually gradual. Indeed, some participants who had left the ICE investigation unit (reportedly for reasons other than stress) said that they did not realise the immense stress they were working under until they were no longer in the unit.

Textbox 25: Interview quotes about coping with problems

"You're running on high all the time and that speed becomes normal. Once I left I just crashed. Everyone handles things differently and everyone has a different personality but I always thought I was doing okay. It's when you take a step away from that environment you can sit back and analyse a lot of the stuff. Maybe I was not as well-structured or organised as I originally thought."

"Policing is still very much the boys' club mentality. You don't talk about your problems, you don't show any weakness and you plough on and get the job done. You don't want to go to work and hear about everyone else's problems. We've got a job to do and we have to get it done."

Coping strategies

Participants talked extensively about the strategies employed, both personal and organisational, to cope with the challenges faced in their daily jobs. The most frequently discussed strategy was informal debriefing, which was described as sharing work-related and personal experiences, exchanging concerns and socialising. While some participants reported utilising this strategy with family members (particularly partners who worked in the police force), the majority preferred to debrief with work colleagues. Colleagues were perceived to be best able to empathise (as they have similar experiences) and did not need to be protected from the realities of the case material.

Textbox 26: Interview quotes about informal debriefing with colleagues

"I don't want to weigh my wife down with all the stuff I'm seeing or vent with her just to get work issues off my chest. Why torture her with the crap? I talk about it to the other guys on my team who deal with the same stuff and can relate to what I'm talking about. People who don't have an appreciation or experience in what you see can only offer you lip service and say, 'Oh, that's really bad', but you know that they've got no idea what you're talking about. No one has any idea about those images until you see them."

"When my wife or mum wants to know how work is going, I'm not going to say that I saw something I didn't want to see and I'm pissed off about it. That's just damaging somebody who doesn't need to be damaged - it's inappropriate to shatter or shift their slightly nicer-than-mine view of reality just because it's changed the way I think."

A prominent feature of the interactions with colleagues was the sharing of black humour, which enhanced social bonding and provided relief.

Textbox 27: Interview quotes about using humour as a coping strategy

"I hate to say it, but the old line, 'If you're not laughing about it you're in the foetal position crying', is true. If you can't laugh and make light of the situation, you'd go stir-crazy and end up in a straightjacket. Obviously you've got to do it in front of the right people - you certainly wouldn't be mucking around and joking in front of victims or members of the public or even other areas of police. They wouldn't see the funny side of what we do."

"Part of de-stressing is that you develop a very dark, black sense of humour. If a normal person listened to the things we say to each other they'd think, 'You guys are freaks'. But it's not that we joke about children or anything like that. We joke about the sex offenders themselves and how sick they are or things like that. It's just to break the ice in the room and reaffirm that it [ICE offending] is abnormal behaviour."

Despite the widespread use of informal debriefing and humour, several limitations were recognised with these strategies. Participants acknowledged that the relief was temporary, and high staff turnover and the stoic police culture sometimes hindered the establishment of trust between colleagues. Further some personal topics, such as arousal to images, could not be discussed. This was, in part, to protect the organisation.

Textbox 28: Interview quote about a limitation of coping strategies

"Arousal to the material is definitely not discussed. I'm not saying it's frequent but it's a huge taboo because that's where all of our systems could fall down. If someone was that desensitised to what they were viewing that they were just viewing it as normal pornography and were getting aroused by it well I think the whole of the organisation would be up in arms with the type of litigation that might come."

Some participants reported the occurrence of more formal (organisational) debriefing strategies. These included (a) employee assistance programs such as peer support officers, chaplains and formal team-building exercises and workplace discussions; (b) debriefs with a team leader; (c) performance evaluations; and (d) individual consultations with an organisation-appointed psychologist. Although some participants reported benefit in visiting the organisation-appointed psychologist, the majority had obvious disregard for all formal debriefing strategies. The biggest perceived limitation of visiting the psychologist included poor competency. Specifically, participants complained of the following: psychologists being underqualified, a mutual resistance to engagement within the therapeutic relationship, psychologists being uncomfortable hearing case-related material, the inability of psychologists to relate to the challenges that ICE investigators face, the apparent failure of the psychologists to detect malingerers who were seeking an early transfer out of the ICE unit for non-psychological reasons, and the apparent inability to diagnose and treat colleagues who are evidently struggling.

Textbox 29: Interview quotes about contact with organisation-appointed psychologists (part 1)

“My most recent psyche evaluation was done by an under-qualified lady. I don’t blame her, I blame the organisation who put her in the role. If I didn’t have other [therapeutic] options I would be very, very angry, I would be rotable.”

“I find the process [of seeing psychologists] to be quite superficial. They have no insight into our office environment and as long as they can get through their three pages of proforma questions and ticks and flicks in the 35-minute contracted time slot they are happy. I tried to get a little bit out of it but could see they would become uncomfortable when I raised cases; like they’d say, ‘Okay this is actually coming to an end’, after they sort of ticked the appropriate boxes. When I first started I was asked if there was anything I’d like to speak about, so I asked about my exposure to a large amount of legitimate pornography and then within that the internet exposure of child pornography. I wanted to know how that would affect my perceptions of pornography and legitimate sex and that sort of thing. They were very uncomfortable and couldn’t talk about it. For me it really highlighted the deficiency.”

“The psychologists [we saw] weren’t prepared to talk about the significant issues and it was quite obvious. There was absolutely no value in it. If you were to go back and have a look at the positive outcomes from these sessions they’d be very limited.”

Further, many participants perceived that formal debriefing strategies were tokenistic. Proposed evidence to support this comment included the following: supervisors failing to enforce ‘mandatory’ visits or follow-ups to the organisational psychologist, the widely held belief among staff about lack of confidentiality during psychology consultations, investigators having to sign regular declarations attesting to good mental and physical health and the absence of long-term health-related monitoring which investigators perceived would be needed to detect chronic accumulation of more subtle symptoms.

Textbox 30: Interview quotes about contact with organisation-appointed psychologists (part 2)

“I think they [police executives] mandate psychological visits because they have to, not because they believe they are that effective.”

“I’ll be perfectly honest with you - my take on the psychologist aspect is it’s an arse-covering exercise for the organisation. Most members would think it was a waste of their time. It would be a 10-minute, ‘How you going? How you feeling? How’s that stuff going? Yeah, yeah! Good, good, good!’ Revolving door, ‘See ya later, see you in six months!’”

“You’re supposed to have an interview with the psychologist when you join the workgroup but I never had mine filled out. It just never seemed to be organised and wasn’t followed up by management so it just never ever got done.”

“The police psychologist is supposed to be completely anonymous - they say, ‘Nothing gets outside the doors’, and all that sort of stuff, but I’ve heard horror stories! One particular guy got assaulted on the job. He was pretty messed up and went to the police psychologist. The first thing they said was, ‘How you going?’, and being the bloke that he is he goes, ‘Oh, not too bad,’ doing the old brave face sort of thing. But later on down the track he puts in his compensation claim and out came his files and his lawyer said, ‘Hang on a tick, they asked you how you were going you said you were okay.’ He said, ‘I said that to the police psychologist and that’s anonymous’, and they said, ‘Oh yeah, sort of, but not really.’ So I wouldn’t speak to the police psychologist about that aspect. I would only speak to external psychologists and they cost an arm and a leg so I don’t do it.”

“Making us declare on paper whether we’ve looked at ICE and whether we’re affected by it doesn’t work because, to be honest with you, you don’t feel affected at that point anyway. If you’re going to be affected, it will creep up on you over time.”

Several suggestions were offered in relation to how the perceived deficiencies with the formal debriefing strategies could be corrected. Enabling investigators to choose an external psychologist at the organisation's expense, creating a direct channel of communication between the investigators and psychologists when initiating appointments (rather than supervisors arranging appointments) and the enforcement of mandatory visits to psychologists (to remove the stigma associated with seeking mental health support) were suggested.

Textbox 31: Interview quote about suggestions for alternative psychological support

"It would be much better if we could see someone who had nothing to do with the police. There's an unspoken rule among ICE members that if the psychs identify you as someone who is not coping then you'll be moved. Whether it's true or not, the perception is that psychs who work for the police are there for the police."

In addition to the formal debriefing strategies (discussed above), participants described two other organisation-imposed coping strategies. One of these strategies was peer monitoring where investigators or supervisors are obligated to inform police management of a colleague who is not coping. Peer monitoring was reported to be incidental to performing normal work duties, whereas for supervisors it may involve monitoring through internal documentation such as absenteeism or employing a case management system to track officers' management of workload. However, similar to formal debriefing, the majority of participants who spoke of this coping strategy perceived it to be tokenistic and inadequately implemented.

Textbox 32: Interview quotes about peer and supervisor monitoring processes

"There is a formal method of debriefing once a month... Staff members have to put in a report on all the work they've done for that past month and part of that process is for me, as their supervisor, to check that as well as to indicate how staff how are travelling and what issues they've got if any. But how would I know? I'm not a psychologist; a police officer is unlikely to talk to a supervisor if they've got issues."

"Management always think formal debriefing sessions with management involved are good. My experience is that people aren't inclined to say what they think with management, for fear of either being shot down in flames or ridiculed about it later."

"We have a monthly team meeting which is sort of like an informal debriefing process. But it's not consistent debriefing. With one particular supervisor running it, it'll be, like, 'Go and clean up the lab and these are the things you've done wrong in the last month'. With another supervisor, it'll be, like, 'Let's go to the pub and have some beer'. It's not really consistent."

The other organisation-imposed coping strategy mentioned by participants was enforcing time limits on exposure to ICE material, both 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 without a substantial break. Although, in principle, participants acknowledged that the idea of minimising exposure to ICE material had some merit, the benefit of reduced exposure was often outweighed by practical issues. For example, the volume of work that must be completed within a restricted time frame, and the fact that computer analytic work is sometimes located a considerable distance from the investigators' usual place of work, leads to widespread non-compliance with time limits on continuous hours of viewing. Further, ICE requires a highly specialised form of investigation, where the expertise takes considerable time to develop. Thus maximum employment tenure of two or three years leads to perpetual de-skilling of the unit. Achieving the right balance between reducing the intensity of an individual's exposure to ICE material versus reducing the number of employees exposed to ICE material was also reported to be a complex and contentious issue.

Textbox 33: Interview quotes about time limits on ICE exposure

“There is an alleged limit on how long we can view material for. I think it’s two hours a day. But that never happens because time is too precious. When our electronic crime area says, ‘We’re ready for you to come over, we’ve got your computers set up to review,’ we prefer to block at least eight hours and finish the job. There are too many other people waiting on you.”

“If you’ve got a country policeman who has seized a couple of computers and there are a million images on them, he doesn’t really want to come to the city on X amount of occasions and view the material for four hours at a time. He might try and slip through the backdoor and do the 12-hour shift so he can bowl it over and go home.”

“The boss has tried to bring in a policy of rotating people every year or two years but it just didn’t work as people didn’t want to do this work. People didn’t want to get here, be trained to the point where they can actually do the work and then have to be rotated out again.”

“The organisation has decided that it’s going to handle the impact of exposure to ICE by exposing fewer people so it’s decided that some of us are going to be really screwed up and others will be slightly screwed up. I’m not a fan of that decision.”

The remaining strategies mentioned by participants related to behaviours performed by individual investigators to ‘switch off’, keep the work within a broader life perspective, or release tension, as a way of coping with ICE investigation. For example, ritualistic behaviour (e.g., showering after a shift) was used to symbolise that work was over and to disengage one’s mind from the workplace.

Exercise was viewed as important, as it assisted in the release of tension. However, exercise was also talked about in the context of maintaining general health, as was eating healthily, spending time outdoors, and having a strong family and friend network outside the police force. Some participants recognised that when all aspects of wellbeing were not aligned they were more vulnerable to harms arising from ICE investigation. Opinions varied as to whether exercise should be allowed as a form of instant relief during work hours.

Some participants reported an increase in alcohol consumption as a means of coping with ICE investigation, despite proactive attempts within police organisations during the past years to minimize heavy drinking among staff. A decline in healthy lifestyle behaviours (due to the long hours, intensity and nature of the work) was seen by some as inevitable.

Textbox 34: Interview quotes about physical health impacts of ICE investigation

“I think my overall health suffered while I was working in ICE due to my lifestyle. Since I’ve left there I’m eating better, my hours are more sensible, and I started to exercise again in the morning.”

“Working in ICE probably makes you an unhealthier person. When you turn the computer off after watching images, it feels like you did a five-hour exam – your body is absolutely stuffed.”

Finally, several coping strategies reported by participants were purely psychological in nature. These included distraction techniques such as the following: focusing on the inherent societal value of the work achieved through successful prosecution; playing online adventure games or (for those where ICE investigation only represented part of their workload) breaking up the work routine by switching between ICE-related and non-ICE-related tasks; concentrating (when viewing the material) on the procedural and analytical aspects of the task; and remaining aware of activity occurring in the general workplace (rather than remaining purely focused on the ICE material).

Textbox 35: Interview quotes about the rewards of ICE investigation

“There’s a huge sense of satisfaction from locking up someone that you know is abusing children, or someone who talks about or thinks about abusing children. To think that we prevented someone from going on to offend against a real child – I find that very rewarding.”

“The process of finding him, arresting him and then putting him before the courts helps me a lot. Knowing that we get them off the streets is one of our biggest coping mechanisms.”

Summary of coping and resilience

An overriding finding of this study is that while ICE investigation is an area of work associated with numerous workplace stressors, including the repeated viewing of child exploitation images, investigators as a group appear to be coping relatively well. The majority of our sample reported that they were managing well in their job. Additionally, the ease and insight shown when discussing their workplace experiences suggests ICE investigators employ a number of effective personal coping strategies.

It was suggested that some people are suited to ICE investigation roles, whereas others are not and can be heavily affected by the work. Participants described the ideal ICE investigator as being technologically savvy, having the ability to emotionally disengage from the work, being psychologically stable, possessing personal and professional integrity, as well as a sense of humour. Good screening and selection processes for new recruits were supported by participants, but it was also identified that suitability to the role can change over time and that ongoing monitoring and evaluation of investigators was required.

Some participants were confident about their ability to self-monitor coping in their work role, but others were less so. Effectiveness of coping strategies was perceived as being associated with resilience and longevity in the role. Most participants reported that informal debriefing with peers and the use of dark humour were important coping strategies. However, reservations were expressed about disclosing personal arousal to ICE material with colleagues due to concern of possible personal and organisational repercussions. Problems were reported in relation to formal support strategies. For example, organisation-appointed psychologists were described by some participants as ineffective due to poor competency or suitability to supporting ICE investigators, and concerns were expressed about lack of confidentiality and trust. Formal debriefing with supervisors and managers were depicted by some as tokenistic, and there was a general unwillingness to report problems to supervisors due to potentially negative responses. Some participants reported that organisational strategies such as setting time limits on exposure to ICE material were not followed due to personally or organisationally-imposed pressures.

Finally, there were reports by some ICE investigators that their work had contributed to an unhealthy lifestyle

(e.g. fatigue, poor eating habits, increased alcohol consumption), but they also found the work to be highly rewarding due to the detection and prosecution of offenders that often resulted.

3. Exposure to ICE material

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 harm (overall) than face to face interaction with victims of assault.

Textbox 36: Interview quotes about impacts of exposure to ICE material (part 1)

"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 the ICE area, that's in general, it can be in any policing area that that can be the case."

"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 in a sense of their happiness. They have a lack of understanding of the nastiness and evilness of the human conditions, for some people anyway, and that's a good thing for them because if they lose that they don't get it back."

"I just feel mentally drained and mentally fragile. You feel 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 and in some other images you get used to it and you don't even think twice. But 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 and it's not until something new comes along again that you probably feel a lot again."

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 unempathetic 'hardened' and flippant attitude. Others considered 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.

Textbox 37: Interview quotes about desensitisation to ICE material

"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 or lose that identification then there are kids suffering there. 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."

"When I'm doing the job behind the computer, looking at the images, I just get on with it without thinking about it. I'm in the right frame of mind to do the job so I'm not looking at anything at this stage going 'Oh my God! Oh that's terrible! Oh that's shocking! Oh that's terrible! Oh my God!' You just go into it and you just go 'that's young, that's young, don't know about that one, no she's older, he's older,' and you're just ticking boxes off and you're just ploughing through thousands and thousands and thousands of images and you're ticking boxes to get the job done."

"I think initially when you first start off the material kind of throws you a bit but after a while I think you just view it as a number that it needs to be classified as, so you just view it and as soon as you see there is penetration there you mark it as 4 on the computer system and just move onto the next one."

The remainder of this section focuses on participants' experiences when working on casework that evoked particularly aversive psychological responses. Perceptions are summarised under two separate themes; (a) individual reactions to particularly adverse material, and (b) the situational, individual, and features of a specific case that influenced reactions.

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 reaction while viewing the material included nauseous, sad, angry, frustrated, shocked, feeling sorry for the victim, mentally draining and demoralising. Some participants (in all cases males) reflected on the issue of arousal to the material in the context of their own experiences, 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.

Textbox 38: Interview quotes about arousal to ICE material

“Certainly people with child porn are going to have generally all forms of pornography on their computer from bloody animals right through to just normal heterosexual pornography. That would be probably a topic that no-one would discuss with each other. But being anonymous I can certainly say looking at pornography definitely arouses me full stop.”

“Arousal definitely occurs. Even looking at child pornography you’re looking at images of intercourse, so I’m sure the male brain is not clever as the female brain deciphering between the two. All I’m looking at is images of intercourse. If there are children involved I may still be in stages of arousal. I suppose my brain is saying this is abhorrent disgraceful material and I want to see the bugger doing this going to jail, but yeah it definitely occurs, definitely.”

“Is it the sexual act that they’re viewing or the pornography side of it that triggers that arousal? Is it a physiological response rather than some other sort of response? I don’t know. It’s definitely not discussed. I think it’s a huge taboo because I guess that’s where all of our systems could fall down – if someone was that desensitised to what they were viewing that they were just viewing it as normal pornography and were getting aroused by it, well I think the whole organisation would be up in arms with the type of litigation that might come... I think if it ever came out that someone was aroused at the material it would be very interesting how it was dealt with. I don’t think we would know about it and I think management would keep it very quiet if the person ever felt comfortable enough to actually be able to say something like that. Yeah it’s definitely a taboo topic.”

Longer lasting responses to viewing abhorrent ICE material were as follows; 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 their dreams, reduced interest in intimacy (both emotional and physical) with their partner and in normal pornography, discomfort engaging in routine physical interaction with their 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.

Textbox 39: Interview quotes about impacts of exposure to ICE material (part 2)

“When you first see a new image like that you have flashbacks of that image. I had flashbacks, a clear crystal crisp image. I’m doing it right now. I can picture what I’m thinking of and that will last sort of that day or that night and then after a period it’ll come every couple of days. You’ll be doing something like watching TV or be on the computer and for some reason that image will just come into your head you sort of have to shake your head and go ‘oh no’ and then it’ll go away.”

“It affected my sleep. I closed my eyes and I could just see the kids tormented over and over and over and that probably caused my psychological distress for two, three, four days after each time that I had to look at that particular image or that particular video.”

“I won’t want to have sexual intercourse with my wife during the period that I’m viewing. I don’t really feel like sex during that period. Sometimes you’re having flashbacks of images during that period of viewing. That goes away after a few days or a week, but when it’s still fresh in your mind I don’t feel like then engaging in a sexual relationship.”

“All of a sudden for whatever stupid reason, you have that image in your head. That’s why during those periods of viewing I don’t like to have sex at home because you don’t want that image to come into your head. You can’t control it sometimes and it’s hard to try and get aroused when you’ve spent five hours looking at babies being abused or something like that.”

“It actually changed my perspective now when I’m looking at normal pornographic material, I’m aware of the fact that some of this is exploitation of adults. Okay, you bear it, you’re making the assumption because they’re over 17 that they’re a willing participant and 99% of the time I’d say that’s the truth, but you’ll see some pornography where it’s fairly obvious that some of the adults aren’t enjoying themselves and I guess it’s changed my perspective on that sort of thing. I hadn’t even thought about it beforehand I don’t think but now it’s something that’s obvious to me.”

“It’s dulled my interest in normal pornography. I have no motivation, like I don’t look at it on internet sites and I think it’s come from the exposure that I’ve had in that negative pairing with ICE.”

Several participants also reported a more generally negative view of the world and their place within it, for example, greater distrust and intolerance of others, overprotectiveness of their children, and increased feelings of helplessness and sadness. It should be noted, however, that it was not always clear to participants 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.

Textbox 40: Interview quotes about impacts of exposure to ICE material (part 3)

"If I'm doing a job where there's a large number of images and videos to go through, particularly the more graphic stuff, I've spent a good part of my day doing it and it will just put me in a shitty mood and I'll feel a bit flat. 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. They said that I didn't laugh as much anymore. I always used to have a sense of humour and a laugh but I didn't laugh much anymore and I'm a lot more serious."

"Well it's one of those things where you look at people differently, you assess things differently. I can meet blokes and I can think 'oh I think he's a sex offender' and I might not even have knowledge of that person but it's just something about them and my mind just goes 'oh my God I think he's a sex offender because he's doing this or he's doing that' so you don't think like a normal person. I have a 16-year-old daughter and since I've been in the ICE office I constantly have thoughts about somebody getting into her room and doing really bad things to her. I constantly think about that sort of stuff. I see kids at the pool and I don't think about the kids at the pool having fun or whatever, I'm constantly looking around and going 'right, he's at the pool, he's watching these kids'. It's so large, you don't realise the scale until you do this type of work. You don't realise the scale of the amount of people who are out there that are sexually perverted or have a sexual interest in children and I think after a while it really does get under your skin. You start looking at people differently to what you would ordinarily as a normal person."

"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 the children because I think that you just naturally get like that when you view these images and deal with these types of offenders."

"I think from a purely parental point of view you tend to be paranoid about leaving your kids with someone else or what you allow your children to do or not do. 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 good thing but probably not necessarily a bad thing either. I think beforehand I was a lot more trustworthy, especially with friends and family. 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. I think it's just your perspectives change and your thinking processes change."

"There's an awful lot of people out there who are prepared to take advantage of children. I have a thousand stories of abuse in my head and I see the mothers of some of my kids' friends and I say 'wow, I wonder what's going on in your house' and things like that. So I want to be in that person's house before my kids go there. I know that the best protection they have is the relationship they have with me, but I'd still like them to have a gun. Do you know what I mean? Or at least a mace or something."

"I guess it makes me worry a little bit more about my niece and nephews because they're young children and you can't control every environment that they're in. I guess I've just sort of come to realise that as much as you want to protect children and young people you can't necessarily be there 24/7."

"If anything it may have affected me in a positive way. After you've done a job that has a large amount of material you're not thinking about your kids in relation to the material but just the general hazards. You spend all day online and there are stalkers online, or there are people out there pretending to be 10 year old kids and procuring children to do stuff online. It's more an education that you're a bit more restrictive on your kids than normal parents would be because you know how it's done and you know how people can get access to your kids. They kids see it as you're just being overbearing and you don't want them to have any friends and you're trying to ruin their lives, but it's only because you know what people do."

Factors that influence reactions

The participants highlighted that reactions to the material were due in large part to the content. The most frequently mentioned aversive feature (mentioned by 21 of the participants) was age. The material was viewed as most disturbing when the victims were under 6 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.

Textbox 41: Interview quotes about most disturbing content (part 1)

"The worst that you can view is generally involving young children or infants – it is quite shocking to the human eye and the human brain to see that sort of stuff. If there's violence, bondage or bestiality with very young children; that would certainly be far more shocking to view."

"Small children and the level of cruelty or torture certainly has an impact on you."

"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 look 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 as a precipitator of investigators' emotional reactions. Evidence of victim distress and suffering was particularly aversive, 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 has endured.

Textbox 42: Interview quotes about most disturbing content (part 2)

"You're seeing the expressions on their faces, their eyebrows and their temples. All the movement in their faces that show the different expressions of pain and torment and the concern, the worry – these are all the things that you can see in their faces."

"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? Why is this person doing this to me? And I've got to grin and smile and I'm honestly enjoying this'. But you can see straight through it and they're just getting so damaged it's incredible."

Participants' reactions to ICE material are not purely dictated by the content. The medium of the material and the context in which it was viewed also played a role. Some 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.

Textbox 43: Interview quotes about medium if ICE material

"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."

"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."

"I think videos are worse. The stills you tend to gloss over those, you can look at background things and you don't need to focus directly on what's happening, whereas the audio will draw you into movies and you're following the sequence of that. I think the visual of seeing the offender trying to do things and the hearing and their reaction that's the hardest part it makes you just want to jump through the screen and rip his head off."

"Obviously with the video aspect you're hearing what's going on, you're seeing in graphic detail the expressions on their faces – their eyebrows and their temples all the movement in their faces that show the different expressions of pain and torment and the concern, the worry. These are all the things that you can see in their faces in the video that you can't really see in the images."

"We're finding a lot of the new ones have very audible, clear sound, which I think adds to if you're viewing it. It's okay to view it and go yep there's penetration you can move on but I think if there's the sound's there as well and you hear the pain I think it adds an additional level."

"There was one particular instance where the person was viewing material and he'd viewed thousands and thousands of videos and some images but it was one audio file, just an audio file alone, which affected that person so much that they basically left thereafter because of the effect that that audio file had on them."

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.

Textbox 44: Interview quotes about contextual aspects of ICE material

"I've heard of someone in the office where they've seen a child that kind of looked similar to their own child. I'm not sure whether it was just the age of the child or if it actually did look similar but it pissed them off and they left the case for a few hours."

"I got a four-week old and 23-month-old and I've seen images of that age kids being sexually abused – full penetrative sex with adults bound up and gagged and 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. You start getting a bit snappy and I don't have the patience I used to."

"Seeing the escalation of the behaviour of the offenders – it was going from downloading images of child exploitation, to making images of child exploitation, to making dolls, to approaching children and that was over a two-year period. It was most concerning that no matter how much intervention I had with this person they did not stop and they were getting worse and that the court system was falling down because we couldn't put them in custody and keep them there. It was the fear that whatever we were doing wasn't enough."

"I remember looking at it and being angry firstly and feeling so sorry for this poor kid who's obviously got to deal with this on a daily basis and if it started here it's just going to get worse and worse because this guy is obviously a narcissistic personality that enjoys inflicting pain to get his rocks off kind of thing."

"For example, 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 part in homosexual in nature now. I don't necessarily have a problem with that straight up, but I certainly wasn't expecting it, so having suddenly a large

quantity of quite obvious. It was a man in his 40s and 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."

Further, 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.

Textbox 45: Interview quotes about emotionally disconnecting from ICE material

"One of the tricks that I've learnt is to not become emotionally involved when viewing the material that we're looking at. Do a quick application of the legislation, so go through it, go through it, go through it and don't dwell on a one particular image and say 'how can somebody do this to somebody else?' 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 illegal material."

"I approach the material just a numbers game. I don't look at it and dwell on what the material is because I don't really care. 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?"

Summary of exposure to ICE material

Overall, the current results shows ICE investigators can experience emotional, cognitive, social and behavioural consequences attributable to exposure to ICE material and that some examples of ICE material are more impactful than others. The strength of the impact was influenced by specific features of the material. It should be noted that risk factors and consequences reported by participants varied across individual investigators, suggesting there is no truly universal ICE investigation experience.

The majority of participants found ICE material disturbing and confronting, but felt that it did not put them at higher risk of harm than other forms of police investigation. A small number of participants reported

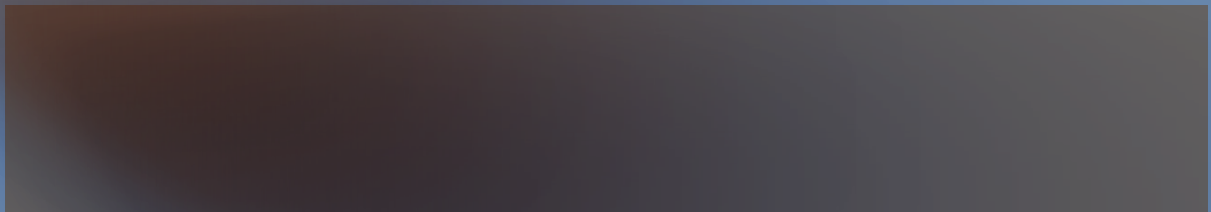
that they felt significantly affected by the nature of their job. A wide range of adverse effects were described, including emotional (e.g., anger, irritability, helplessness), psychological (e.g., numbness, intrusive thoughts and imagery), physiological (e.g., sleeplessness), sexual (e.g., reduced libido) and social (e.g., distrust of others, discomfort around children). However, it was not clear as to whether these effects were related to ICE material exposure or other workplace stressors. A number of factors were identified that influenced the type and extremity of reactions to ICE material, including the content, context and medium. Participants also cited non-ICE material (e.g., violence, bestiality, fetishes) that produced strong adverse reactions. In the anonymous context of the interviews, some participants reported that arousal to material they viewed did occur, but was a physiological response to a mixture of legal and illegal pornography.

Conclusions: Study 2

Interviews with a sub-sample of participants have allowed us to explore in greater depth some of the key issues that were identified through the survey. Consistent with the findings of Study 1, exposure to ICE material did not emerge as a primary source of occupational stress for most participants. Rather, the concerns of investigators were similar to those that might be found in other areas of policing, and indeed in the work place generally – relationships with colleagues and external bodies, work load and the provision of adequate resources, and the physical work environment. Like most workers, ICE investigators want to feel that they are carrying out a worthwhile role and that others recognise and appreciate their contributions. Overall, most participants found their work to be highly rewarding. The main conclusion of this study is that while ICE investigation involves numerous workplace stressors, investigators as a group appear to be coping relatively well.

This is not to say that the repeated viewing of ICE images is without stress or that investigators are always successful in managing that stress. Most investigators found the ICE material disturbing, with some types of material more disturbing than others. Most have developed personal coping strategies – in particular, informal debriefing with peers – to help them manage the disturbing aspects of their work. However, a small number of participants reported significant ill-effects attributable to their exposure to ICE material. Reinforcing the findings of Study 1, the interviews indicate that there is no universal ICE investigator experience. Organisational responses to managing the impacts of ICE investigation on staff need to take account of the variability among investigators.

General Discussion



General Discussion

The current study adds to the small body of prior research that has examined the psychological, social and physical impacts specific to ICE investigation. In this final section of the report we summarise the main findings of the research and draw out the implications for the management of the occupational health impacts of ICE investigation. We conclude with an assessment of the strengths and limitations of the current study.

Main Findings

In terms of wellbeing, the quantitative results indicate the average ICE investigator was not adversely affected by investigating ICE material, denoting resilience in the face of potential workplace stressors and challenges. The organisational climate was generally perceived to be positive, as indicated, for example, by the mean levels of job satisfaction, role overload, work engagement, pride in their unit and respect from other units. These general conclusions hold in comparison to a non-ICE exposed control group of police officers, across two data collection periods and is corroborated by the qualitative data.

ICE investigation should not, however, be considered a completely risk free endeavour. The qualitative data indicate ICE investigators can experience various short and long problems. These include negative emotional reactions (such as anger, sadness and disgust), discomfort interacting with children, reduced emotional and physical intimacy with partners, heightened awareness of the potential presence of child sex abusers, and symptoms of PTSD such as intrusive recollections and hyperarousal. Further, even though the quantitative analyses show the average ICE investigator experiences symptoms of psychological dysfunction at subclinical levels, analysis of the longitudinal quantitative data indicates it is possible for individual investigators to develop clinically significant levels of PTSD, depression and stress over time. Risk factors (job demands) and resilience factors (job resources) were identified in both the quantitative and qualitative analyses. Job resources were located at the organisational, individual and social levels. Job demands were found in organisational, individual, social and physical domains.

One conclusion that can be drawn from this research is that investigation of ICE material was not generally sufficient in of itself to be solely responsible for any decrease in wellbeing experienced by the majority of investigators in this sample. A second conclusion is that maintenance of the current level of ICE investigator wellbeing requires minimisation of avoidable job demands or counteracting unavoidable demands by maintaining existing job resources and introducing additional resources. Given that job resources and job demands were located within the broader organisational context and the individual it follows that organisations and investigators both have roles to play in minimising risk and maximising resilience.

Implications

In this section we outline the implications current findings, in conjunction with previous research, have for managing the occupational health impacts of ICE investigation. We cover the following areas: recruitment and selection; training; supervision; employee assistance; working with external professionals; technology; workplace design and physical comfort; and personal coping strategies.

Recruitment and selection

The results suggest recruitment and selection is relevant for the reduction of role overload, job performance and proactively minimising susceptibility to harm within the workforce. These harms can be partly attributed to an insufficient number of competent investigators available at any given time (exacerbated by the practice of assigning experienced ICE investigators to jobs completely unrelated to ICE investigation). Unselectively recruiting more people to work as investigators would, however, be counterproductive. The reason is recruiting staff lacking necessary knowledge, skills, abilities increases role overload as experienced investigators must add training to their core duties. Therefore hiring more staff would only minimise role overload if recruitment targets those with previous experience as criminal investigators (participants mentioned experience investigating crimes with a sexual element) that have an interest in cyber-forensics and some knowledge of computers and the Internet.

In addition to knowledge, skills, abilities and interests the current results suggest personal characteristics and circumstances could be taken into account during the selection process. The more desirable characteristics (in terms of their perceived association with resilience) identified by participants were: ability to separate work from home; emotional stability; capability to maintain professional detachment without losing empathy; a realistic idea of job requirements and awareness of personal strengths and weaknesses in relation to meeting job requirements (also indicated by the identification of limited emotional awareness as a risk factor in round one and round two of the statistical analyses); willingness to seek support from management when necessary; an articulate lateral thinker, able to contribute to unit morale (largely through being able to develop a sense of humour about their work); intrinsically motivated to prevent ICE offences without being a 'crusader'; personal and professional integrity; and being a sworn police officer. The characteristics deemed to be less desirable in ICE were being moralistic, overly empathetic with victims, holding strong religious convictions, poor health, having children similar in age to victims and having a personal history of sexual abuse.

Screening processes could be complemented with providing candidates with realistic job previews. Participants suggested that prospective employees be exposed to a representative sample of ICE material and meet with active ICE investigators for a frank discussion about the requirements and impacts of ICE investigation. Some participants also suggested a probation period of three months, the intention being to allow time for the development and application of personal coping and practical job-related skills.

Training

Previous research has found ICE investigators receiving training feel their role is valued by the organisation and report better occupational wellbeing⁷¹. Training can improve the motivation and coping skills of individuals, as well as enhancing work performance that leads to the achievement of organisational goals (e.g., increased successful prosecutions). Ideally training should be given to all incoming investigators and supervisors before commencing in their role and at regular intervals⁷².

Provision of formal ICE specific training to all would help minimise the level of role overload experienced by investigators. The current methods of training ICE investigators appear to increase role overload. For example, reliance on on-the-job training increases the workload of experienced investigators who, in addition to their own caseload, are primarily responsible for training incoming staff that lacks necessary technological or investigatory skills. Similarly provision of formal training to only one investigator (within a specific unit) increases the workload of that investigator who must then relay newly acquired knowledge and skills to all of their colleagues. Furthermore, qualitative role overload is based in a lack of knowledge, skills and abilities, therefore provision of training would reduce qualitative role overload.

Providing ICE investigator training to supervisors (participants actually suggested supervisors should perform some casework) and employee assistance programme (EAP) personnel represents another potential avenue for protecting investigator wellbeing. The reasoning, suggested by the qualitative data, is that supervisors do not necessarily have prior experience as ICE investigators and therefore lack insight into the technical and emotional demands of the job. Supervisors who understand ICE investigation were perceived as better able to fairly allocate workload between investigators (reducing quantitative overload), value ICE investigation more highly, and capable of providing useful operational and social support. Previous research indicates that supervisors who understand ICE investigation positively contribute to investigator wellbeing⁷³.

Similarly, current and previous results indicate higher levels of EAP personnel understanding of ICE investigation positively impacts investigator wellbeing⁷⁴. Participants indicated EAP programs typically do not have a high level of ICE specific knowledge. The need for providing training to EAP personnel is indicated by participant reports of psychologists being under-qualified, a mutual resistance to engagement within the therapeutic relationship, psychologists being uncomfortable hearing case-related material, the inability of psychologists to relate to the challenges that ICE investigators face, the apparent failure of the psychologists to detect malingerers who were seeking an early transfer out of the ICE unit for non-psychological reasons, and the apparent inability to diagnose and treat colleagues who are evidently struggling.

While each organisation may want to conduct their own training needs analyses to tailor training specifically to their own requirements, current results together with prior research suggests some broad content areas worth considering within a training program. These are coping skills, recognition of signs of distress in colleagues, how to provide peer assistance, how to access help, how to conduct internet based investigations, proper management of electronic evidence, likely impacts of investigating ICE material, legal considerations, and how to use relevant software⁷⁵.

Supervision

Supervisors can act as a job resource or as a job demand. Characteristics of supervisors who functioned as a job demand included: being primarily concerned with budgets and their own organisational standing, were micromanagers, did not understand the emotional or technical requirements of ICE investigation, did not have a realistic ideas as to how long it would take to perform different tasks, did not know individual investigators well enough to allow trust to develop or to be able identify when an investigator was not coping (which can be signalled by gradual changes in behaviour or physical changes that could easily be missed if unfamiliar with the investigators normal state) and failed to organise mandatory appointments with EAP staff.

The type of supervisor who functions as a resource behaves in ways that provide a foundation for mutual trust, provide administrative assistance necessary to allow investigators to concentrate on conducting investigation as effectively as possible, lessen the amount of role overload (a statistically identified risk factor), allow autonomous working (a statistically identified resilience factor) and provide case related feedback (a job resource that can meet a basic human need for competence and be useful for meeting needs for learning and development).

While the specifics of a supervisors selection criteria would need to be tailored to the requirements of each jurisdiction, a general suggestion would be prospective supervisors have demonstrated competence with administrative requirements and personal characteristics similar to those mentioned above as desirable in ICE investigators. The reasoning is that participants have identified that supervisors need to be competent administrators (but not micromanagers as micromanagement is known to lower autonomy and job satisfaction while increasing stress, burnout and the time

it takes to complete tasks), knowledgeable about the ICE investigation process, and be seen as trustworthy and approachable.

Trained supervisors who have demonstrated their capacity to manage ICE investigators should not be rotated away too soon. This suggestion is based on participants mentioning that frequent rotation of supervisors lessened the likelihood of developing the level of trust investigators require before approaching the supervisor for support.

Employee assistance

The qualitative data indicates that organisations use a variety of formal employee assistance processes such as (a) peer support officers, chaplains and formal team-building exercises and workplace discussions; (b) debriefs with a team leader; (c) performance evaluations; (d) individual consultations with an organisation-appointed psychologist; and (e) imposing time limits on exposure to ICE material (limits to maximum continuous hours of exposure and limits to tenure as an ICE investigator).

The data suggest the average current investigator rated accessed sources of support as 'slightly helpful' due to ambivalence and a level of mistrust. Ambivalence appeared to be based in a widespread belief that organisations utilised these processes to meet administrative requirements but were not genuinely concerned about investigator welfare. The lack of trust seems to be related to a mutual unwillingness to engage (between EAP staff and investigators), unwillingness to trust unfamiliar peer counsellors, EAP staff incompetence and doubts about confidentiality of the therapeutic discussions. Concerns about confidentiality and competence may be particularly pertinent if an investigator is worried that they are developing an attraction to ICE material.

Reducing the level of ambivalence and mistrust would require a number of changes to the way in which EAP processes are currently implemented. The training of those mandated to provide employee assistance (discussed above) represents one method of doing so, though investigators need reassurance that any information they disclose remains truly confidential. The practice of routinely asking investigators to sign statements of good health should probably cease. Mandatory visits to EAP staff should be enforced and such visits should be a regular occurrence to facilitate long term monitoring of investigator wellbeing. Regular monitoring would be useful as the longitudinal data showed some ICE investigators' wellbeing can deteriorate over time.

EAP providers should look for signs that an investigator is becoming increasingly disturbed by less explicit material and that an investigator is worried about becoming attracted to ICE material. If the latter is detected, it should not be assumed that the investigator is actually becoming attracted to the material. Avoidance of work tasks (absenteeism, a reluctance to take on new cases or view material and poor paperwork) was mentioned as sign of poor coping (workload is apparently often used as an excuse). Changes in behaviour and personality (e.g., aggression, irritability, anxiety, fatigue, impatience, teariness, social withdrawal) and or physical appearance (e.g., weight loss or gain, a dishevelled appearance and looking fatigued with no alternate explanation) were also identified by participants as signs of impaired wellbeing.

Peer assistance programs can be beneficial inside law enforcement organisations⁷⁶ including for ICE investigators⁷⁷ yet the current implementation appears to be suboptimal. One possible modification to the current method could be to recruit voluntary former ICE investigators trained to provide telephone based confidential EAP assistance. These former investigators would have legitimacy conferred by being volunteers and possessing a level of understanding of ICE investigation by virtue of having been active ICE investigators. Further, organisations would need to give more credence to peer reports than participants suggest is currently the case. Finally, investigators should be encouraged to supplement mandatory support processes with their preferred type of assistance.

Attempts to minimise exposure were viewed as good in principle but impractical. Practicality was limited by insufficient time to complete the necessary amount of work, widespread non-compliance with time limits on continuous hours of viewing (as work is often performed at a different location from their unit headquarters) and concern that the unit would be deskilled. The average ICE investigator thought a period of 'up to 5 years' was an acceptable maximum period of time to work as an ICE investigator. At the same time, we found little empirical evidence to suggest that, as a rule, investigator well being deteriorates as a function of tenure in the role. Given this, there seems little basis to set a blanket maximum tenure limit as long as staff are adequately monitored and supported, and vulnerable personnel are identified and reassigned.

Working with external professionals

Investigators often need to work across domestic and international jurisdictions and with representatives of the judicial system. The qualitative data show that working across jurisdictional boundaries is associated with time delays in responses or actions, misunderstandings and conflicts arising from different laws, priorities and procedures. These problems reduce the job resource of workplace autonomy while increasing the job demands of role overload, role conflict and role ambiguity. Working with the judicial system creates stress though the need to meet the evidentiary requirements (perceived to be unreasonable by participants) of the judicial system (low workplace autonomy is a job demand and contributes to increased levels of role overload through the combination of short time frames with an extremely large volume of work) and dissatisfaction with case outcomes when investigators believe the results do not reflect the quality of the evidence provided to the judiciary (contrary to the basic need for competence).

Senior management have scope to reduce the strains caused by working with external professionals. Internally, senior management need to introduce concrete guidelines for investigators to follow when interacting with various external stakeholder groups. This may require senior management to negotiate with external agencies on the behalf of ICE investigators before producing internal guidelines. For example reaching agreement with their counterparts in other jurisdictions about mutually acceptable timeframes for processing evidence or responding to requests or negotiating with representatives of the judicial system regarding the acceptance of representative samples of ICE material and computer generated reports.

Technology

Technological limitations contributed to reduced employee wellbeing (through increased workload, for example through double handling and creating a backlog of cases, and unnecessary exposure) and reduced investigative efficiency. While it is beyond the expertise of the researchers to make specific technological recommendations, organisations should examine the technical limitations most relevant to their operations and take the necessary steps to reduce these limitations. For example, use of image scanning and classification software can reduce unnecessary exposure, increase the number of concurrent cases a single analyst can work with, reduces backlog and produce reports suitable for

use in court⁷⁸. This suggests technology can lessen the impact of job demands on investigator wellbeing while increasing the potential performance ceiling of an ICE unit.

Workplace design and physical comfort

The qualitative data reveals most investigators do not have a suitable workspace. Completely open office spaces, while advantageous for reducing isolation, increased the risk of unnecessary ICE exposure (to support staff, visitors and investigators not involved in a specific case), made confidential conversations difficult and were unsuitable for performing some investigatory tasks (for example background noise is undesirable if engaged in telephone conversations with an offender and investigatory staff from different locations may be forced to move around the office as people start shifts while having to try and concentrate despite background distractions).

Physical comfort was another issue. Participants mentioned poor ventilation, excessive ambient heat emanating from the computers, cramped overcrowded workspaces, insufficient natural light, and furniture that was not ergonomically suitable for long hours of sitting. These work conditions were claimed to reduce productivity and present significant occupational health and safety risks. Physical discomfort is a workplace demand as it exacts costs but does not supply a compensatory coping resource or increase investigative capacity. As such, physical discomfort can exert a downward pressure on employee wellbeing. Research in ergonomics and organisational psychology has found physical discomfort, ergonomically unsound work spaces and equipment deficiencies to be associated with decreased physical and psychological health amongst employees⁷⁹.

Correcting these deficiencies would require redesigning workspaces. Where possible office spaces to allow natural light, more space between workstations, either building sound proofed mixed purpose investigation/meeting spaces or the use of moveable screens to address privacy and noise issues, using adjustable furniture chairs and training providing ergonomics training.

Personal coping strategies

Investigators can take personal steps to help maintain their own wellbeing. In broad terms, investigators need to preserve and regenerate reserves of energy and maintain enough connection with the material to conduct

an investigation but enough detachment from the material to avoid negative psychological consequences. The qualitative data suggests investigators who can manage to maintain a healthy life style (through exercise, eating healthily and spending time outdoors) feel better able to cope. Part of maintaining a healthy life style would require taking time off. Previous longitudinal research has shown taking time off provides an opportunity for psychological detachment from demanding jobs which protects work engagement while lowering emotional exhaustion (a core burnout symptom) and psychosomatic complaints⁸⁰.

Investigators should be encouraged to avail themselves of potential sources of informal social support. This may involve socialising with family and non-work friends or be found within the workplace. Informal workplace support was identified as useful for explicitly dealing with ICE related concerns. Instrumental support – for example offering advice relevant to job performance and sharing workload – has been found to counteract the negative influence of high workload and emotional demands on work engagement and provide protection against emotional exhaustion⁸¹. Expressive forms of social support – for example, colleagues sharing jokes that would be considered inappropriate elsewhere – have also been found to be effective strategies⁸². It should be noted, however, that participants considered expressive social support to be effective, but only for brief periods of time.

Longer-term relief is likely to require engagement of more formal EAP providers. Given the frequently expressed negative attitude towards formal EAP processes, there may be some reluctance to do so. The current results do, however, suggest engagement with formal EAP processes can be beneficial. For example EAP staff understanding of ICE investigation protected against protected investigators against burnout, PTSD and stress. Investigators who become aware that they are increasingly disturbed by less explicit material or have begun to worry about becoming attracted to ICE material should consider either of these occurrences as a sign to seek help. They may be a precursor to PTSD.

Participants identified a number of viewing strategies they considered effective. Investigators could consider focusing on the inherent societal value of the work achieved through successful prosecution; if possible breaking up the work routine by switching between ICE-related and non-ICE-related tasks; concentrating on the procedural and analytical aspects of the job (viewing the

material as evidence) and remaining aware of activity occurring in the general workplace (rather than remaining purely focused on the ICE material).

Strengths and Limitations of the Current Study

This report concludes with an acknowledgement of this projects' methodological strengths and limitations. The researchers regard the following to be strengths:

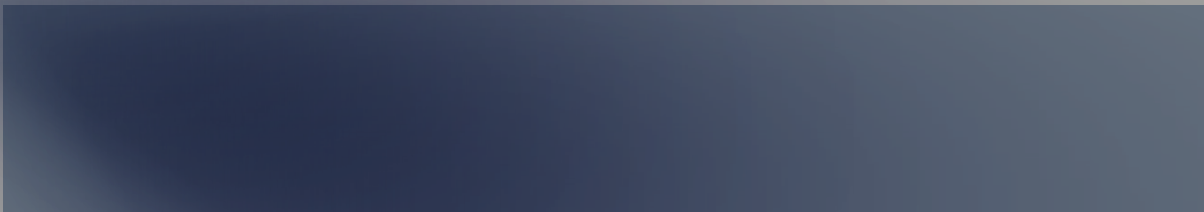
- This is the first study concerned with ICE investigator wellbeing to include a more nuanced categorisation of ICE investigators and has included a control group of non-ICE police officers, allowing for examination of between groups differences in wellbeing.
- The research involved the collection and integration of both qualitative and quantitative data.
- The quantitative study employed a wide range of both standardised scales and purpose-designed scales.
- Unlike previous qualitative studies, the interview procedure was truly anonymous.
- The research involved a longitudinal component.
- The study involved a nationwide sample of ICE investigators from all 9 Australian police jurisdictions.

The researchers regard the following to be limitations:

- The size of the sample resulted in reduced statistical power when comparing some sub-groups.
- The size of the longitudinal sample meant only descriptive statistics could be reported.
- Measures constructed specifically for this project have not been subjected to prior validity and reliability scrutiny. Further research would be required before it is possible to know whether items adequately measure the content domain and generalises to international ICE investigator samples.
- Similarly, the external validity of the current results will remain unknown without further research using these measures (although there is sufficient correspondence between current results and previous ICE investigator wellbeing to suggest this projects conclusions would be replicated in future studies).

Investigators of ICE material play a vital front line role in protecting children from experiencing abhorrent sexual abuse. Protecting the psychological, social and physical health of this dedicated group of professionals is in the interests of individual investigators, their families and friends, the organisations, those victimised by the producers, distributors and users of ICE material, and society in general. The researchers hope the conduct of this project has allowed us to provide a foundation from which the current levels of resilience found within this sample of ICE investigators can not only be maintained but improved upon.

Appendix



Appendix

Scales used in the Questionnaire

(Note: These items were administered online. Therefore the formatting here is not identical to the way the questionnaire appeared to participants.)

1. Quality of life

The following questions ask how satisfied you feel, on a scale from zero to 10. Zero means you feel completely dissatisfied. 10 means you feel completely satisfied. And the middle of the scale is 5, which means you feel neutral, neither satisfied nor dissatisfied.												
	Completely dissatisfied				Mixed				Completely satisfied			
	0	1	2	3	4	5	6	7	8	9	10	
a. Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?	0	1	2	3	4	5	6	7	8	9	10	
b. How satisfied are you with your standard of living?	0	1	2	3	4	5	6	7	8	9	10	
c. How satisfied are you with your health?	0	1	2	3	4	5	6	7	8	9	10	
d. How satisfied are you with what you are achieving in life?	0	1	2	3	4	5	6	7	8	9	10	
e. How satisfied are you with your personal relationships?	0	1	2	3	4	5	6	7	8	9	10	
f. How satisfied are you with how safe you feel?	0	1	2	3	4	5	6	7	8	9	10	
g. How satisfied are you with feeling part of the community?	0	1	2	3	4	5	6	7	8	9	10	
h. How satisfied are you with your future security?	0	1	2	3	4	5	6	7	8	9	10	
i. How satisfied are you with your spirituality or religion?	0	1	2	3	4	5	6	7	8	9	10	

2. General mood

Please indicate how each of the following describes your feelings when you think about life in general.											
	Not at all			Mixed						Extremely	
a. How happy do you generally feel?	0	1	2	3	4	5	6	7	8	9	10
b. How content do you generally feel?	0	1	2	3	4	5	6	7	8	9	10
c. How alert do you generally feel?	0	1	2	3	4	5	6	7	8	9	10

3. Psychological mindedness

The following questions ask for your opinion about the benefits of discussing problems and the accessibility of your feelings.				
	Strongly disagree	Disagree	Agree	Strongly agree
a. Talking about my worries to another person helps me to understand my problems better.	1	2	3	4
b. I've found that when I talk about my problems to someone else, I come up with ways to solve them that I hadn't thought of before.	1	2	3	4
c. When I have a problem, if I talk about it with a friend, I feel a lot better.	1	2	3	4
d. Letting off steam by talking to someone about my problems often makes me feel better.	1	2	3	4
e. I've never found that talking to other people about my worries helps much.	1	2	3	4
f. It is important to be open and honest when I talk about my troubles with someone I trust.	1	2	3	4
g. When I have problems, talking about them with other people just makes them worse.	1	2	3	4
h. Usually, if I feel an emotion, I can identify it.	1	2	3	4
i. Often, even though I know that I'm having an emotion, I don't know what it is.	1	2	3	4
j. I'm usually out of touch with my feelings.	1	2	3	4
k. Often I don't know what I'm feeling.	1	2	3	4

4. Self-sacrifice

These questions ask for your opinion on the balance between serving the public good and looking after yourself.					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. Making a difference in society means more to me than personal achievements.	1	2	3	4	5
b. I believe in putting duty before self.	1	2	3	4	5
c. Doing well financially is definitely more important to me than doing good deeds.	1	2	3	4	5
d. Much of what I do is for a cause bigger than myself.	1	2	3	4	5
e. Serving citizens would give me a good feeling even if no one paid me for it.	1	2	3	4	5
f. I feel people should give back to society more than they get from it.	1	2	3	4	5
g. I am one of those rare people who would risk personal loss to help someone else.	1	2	3	4	5
h. I am prepared to make enormous sacrifices for the good of society.	1	2	3	4	5

5. Job satisfaction

These items are a measure of general job satisfaction.					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. All in all I am satisfied with my job.	1	2	3	4	5
b. In general, I don't like my job.	1	2	3	4	5
c. In general I like working here.	1	2	3	4	5

6. Role overload

These items ask for your opinion about the amount of work you generally have to do.					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. There is a need to reduce some parts of my role.	1	2	3	4	5
b. I feel overburdened in my role.					
c. I have been given too much responsibility.	1	2	3	4	5
d. My workload is too heavy.	1	2	3	4	5
e. The amount of work I have to do interferes with the quality I want to maintain.	1	2	3	4	5

7. Pride in work unit

These items ask about pride in your unit/work group/organisation.						
	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
a. I feel proud to be working in my unit.	1	2	3	4	5	6
b. I talk the unit up to my friends as a good place to work.	1	2	3	4	5	6
c. I would recommend to a close friend that they work in my unit	1	2	3	4	5	6
d. I cannot think of another unit in which I would rather work.	1	2	3	4	5	6
e. I am embarrassed to tell others where I work.	1	2	3	4	5	6

8. Social identification

These items ask about identification with your unit/work group/organisation.						
	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
a. When someone criticises my work group, it feels like a personal insult.	1	2	3	4	5	6
b. I feel strong ties with my work group.	1	2	3	4	5	6
c. I identify strongly with my organisation.	1	2	3	4	5	6
d. When someone criticises my organisation, it feels like a personal insult.	1	2	3	4	5	6
e. I feel strong ties with my organisation.	1	2	3	4	5	6

9. Respect from other units

In general, police from different operational units...						
	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
a. Respect the work I do.	1	2	3	4	5	6
b. Respect my work related ideas.	1	2	3	4	5	6
c. Value what I contribute at work.	1	2	3	4	5	6
d. Value me as a member of my work group.	1	2	3	4	5	6
e. Think it would be difficult to replace me.	1	2	3	4	5	6
f. Disapprove of how I do my job.	1	2	3	4	5	6
g. Do not appreciate my contributions to the job.	1	2	3	4	5	6

10. Realistic job preview

Please think back to the time immediately before starting in your current role and try to remember what information was available about this role. If you are an incoming ICE investigator please think about the information you have been given about ICE investigation.					
Section a: I received accurate information about:	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a. Aspects of the job others found attractive	1	2	3	4	5
b. Aspects of the job others found unattractive	1	2	3	4	5
c. The amount of work required	1	2	3	4	5
d. What the job actually required me to do	1	2	3	4	5
e. All aspects of the job that I consider to be important	1	2	3	4	5
Section b: I received a sufficient amount of information about:	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a. Aspects of the job others found attractive	1	2	3	4	5
b. Aspects of the job others found unattractive	1	2	3	4	5
c. The amount of work required	1	2	3	4	5
d. What the job actually required me to do	1	2	3	4	5
e. All aspects of the job that I consider to be important	1	2	3	4	5
Section c: Overall	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a. Overall, I knew what to expect before I started in this role	1	2	3	4	5
b. I was misled about what to expect when performing this role	1	2	3	4	5

11. Organisational support

Are any of the following types of support available to you?		
	Not available	Available
a. Pre-role employment psychological evaluation	0	1
b. Mandatory, regular psychological evaluations	0	1
c. Regular formal debriefing sessions	0	1
d. Psychological evaluation at your request	0	1
e. Informal debriefing sessions with co-workers	0	1
f. Talking to family and non-work friends about work	0	1
g. No questions asked transfer to another unit on request	0	1
h. Regular job rotation	0	1

Have you ever accessed any of the following types of support?			
	Not available	No	Yes
a. Pre-role employment psychological evaluation	0	1	2
b. Mandatory, regular psychological evaluations	0	1	2
c. Regular formal debriefing sessions	0	1	2
d. Psychological evaluation at my request	0	1	2
e. Informal debriefing sessions with co-workers	0	1	2
f. Talking to family and non-work friends about work	0	1	2
g. No questions asked transfer to another unit on request	0	1	2
h. Regular job rotation	0	1	2

How helpful was/are any of the following types of support?						
	Not available/ Never accessed	Very unhelpful	Slightly unhelpful	Neither helpful or unhelpful	Slightly helpful	Very helpful
a. Pre-role employment psychological evaluation	0	1	2	3	4	5
b. Mandatory, regular psychological evaluations	0	1	2	3	4	5
c. Regular formal debriefing sessions	0	1	2	3	4	5
d. Psychological evaluation at my request	0	1	2	3	4	5
e. Informal debriefing sessions with co-workers	0	1	2	3	4	5
f. Talking to family and non-work friends about work	0	1	2	3	4	5
g. No questions asked transfer to another unit on request	0	1	2	3	4	5
h. Regular job rotation	0	1	2	3	4	5

12. Interpersonal relationships

Since I began doing this job...						
	N/A	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a. My friends and family object to the work I do.	0	1	2	3	4	5
b. I talk to my spouse/significant other about my feelings about work.	0	1	2	3	4	5
c. My friends and family don't want me to talk about what I do.	0	1	2	3	4	5
d. As a result of my work, I am more appreciative of my relationships.	0	1	2	3	4	5
e. I talk to my non-work friends about my feelings about work.	0	1	2	3	4	5
f. I feel comfortable being intimate with my spouse/significant other.	0	1	2	3	4	5
g. I have become more protective of my spouse/significant other than I used to be.	0	1	2	3	4	5
h. I become nervous when my child/ren is around other adults.	0	1	2	3	4	5
i. I am concerned about the type of material that my child/ren are exposed to through the media (movies, TV, music, internet).	0	1	2	3	4	5
j. I am more protective of my child/ren	0	1	2	3	4	5
k. I have become less comfortable with my children using the internet.	0	1	2	3	4	5
l. I can become nervous when my spouse/significant other is alone with my child/ren.	0	1	2	3	4	5
m. I worry about how this work is affecting some of my co-workers.	0	1	2	3	4	5
n. Only my co-workers really understand what I go through on a daily basis.	0	1	2	3	4	5
o. I have a special bond with my co-workers because of the work that we do.	0	1	2	3	4	5
p. I talk to my co-workers about my feelings about work.	0	1	2	3	4	5
q. I have become a more negative person.	0	1	2	3	4	5
r. I have a difficult time trusting people enough to make friends.	0	1	2	3	4	5
s. I am more likely to assume the worst about people I meet.	0	1	2	3	4	5
t. I have a difficult time forming new romantic relationships.	0	1	2	3	4	5
u. I have more difficulty trusting other people's motives.	0	1	2	3	4	5
v. I have become more cynical.	0	1	2	3	4	5

13. Post-traumatic growth

What has changed for you since beginning your current role?						
	Not experienced	A very small degree	A small degree	A moderate degree	A great degree	A very great degree
a. My priorities about what is important in life.	0	1	2	3	4	5
b. An appreciation for the value of my own life.	0	1	2	3	4	5
c. I developed new interests.	0	1	2	3	4	5
d. A feeling of self-reliance.	0	1	2	3	4	5
e. A better understanding of spiritual matters.	0	1	2	3	4	5
f. Knowing that I can count on people in times of trouble.						5
g. I established a new path in life.	0	1	2	3	4	5
h. A sense of closeness with others.	0	1	2	3	4	5
i. A willingness to express my emotions.	0	1	2	3	4	5
j. Knowing I can handle difficulties.	0	1	2	3	4	5
k. I'm able to do better things in my life.	0	1	2	3	4	5
l. I'm better able to accept the way things work out.	0	1	2	3	4	5
m. Appreciating each day.	0	1	2	3	4	5
n. New opportunities are available which wouldn't have been otherwise.	0	1	2	3	4	5
o. Having compassion for others.	0	1	2	3	4	5
p. Putting effort into relationships.	0	1	2	3	4	5
q. I'm more likely to try to change things.	0	1	2	3	4	5
r. I have a stronger religious faith.	0	1	2	3	4	5
s. I discovered that I'm stronger than I thought I was.	0	1	2	3	4	5
t. I learned a great deal about how wonderful people are.	0	1	2	3	4	5
u. I accept needing others.	0	1	2	3	4	5

14. Post-traumatic stress

Please indicate how much you have been bothered by any of the following problems in the last month					
	Not at all	A little bit	Moderately	Quite a bit	Extremely
a. Repeated, disturbing memories, thoughts, or images of a stressful work experience.	1	2	3	4	5
b. Repeated, disturbing dreams of a stressful work experience.	1	2	3	4	5
c. Suddenly acting or feeling as if a stressful work experience were happening again (as if I were reliving it).	1	2	3	4	5
d. Feeling very upset when something reminded me of a stressful work experience.	1	2	3	4	5
e. Having physical reactions (e.g. heart pounding, trouble breathing, or sweating) when something reminded me of a stressful work experience.	1	2	3	4	5
f. Avoid thinking about or talking about a stressful work experience or avoid having feelings relating to it.	1	2	3	4	5
g. Avoid activities or situations because they remind me of a work stressful experience.	1	2	3	4	5
h. Trouble remembering important parts of a stressful work experience.	1	2	3	4	5
i. Loss of interest in things that I used to enjoy.	1	2	3	4	5
j. Feeling distant or cut off from people.	1	2	3	4	5
k. Feeling emotionally numb or being unable to have loving feelings from those close to me.	1	2	3	4	5
l. Feeling as if my future will somehow be cut short.	1	2	3	4	5
m. Trouble falling or staying asleep.	1	2	3	4	5
n. Feeling irritable or having angry outbursts.	1	2	3	4	5
o. Having difficulty concentrating.	1	2	3	4	5
p. Being "super alert" or watchful on guard.	1	2	3	4	5
q. Feeling jumpy or easily startled.	1	2	3	4	5

15. Work engagement

Below you find a series of statements with which you may agree or disagree. Using the scale, please indicate the degree of your agreement by selecting the response that corresponds with each statement.

	Never	Almost never (A few times a year or less)	Rarely (Once a month or less)	Sometimes (A few times a month)	Often (Once a week)	Very often (A few times a week)	Always (Every day)
a. At my work I feel bursting with energy.	0	1	2	3	4	5	6
b. I find the work that I do full of meaning and purpose.	0	1	2	3	4	5	6
c. Time flies when I am working.	0	1	2	3	4	5	6
d. At my job, I feel strong and vigorous.	0	1	2	3	4	5	6
e. I am enthusiastic about my job.	0	1	2	3	4	5	6
f. When I am working, I forget everything else around me.	0	1	2	3	4	5	6
g. My job inspires me.	0	1	2	3	4	5	6
h. When I get up in the morning, I feel like going to work.	0	1	2	3	4	5	6
i. I feel happy when I am working intensely.	0	1	2	3	4	5	6
j. I am proud of the work that I do.	0	1	2	3	4	5	6
k. I am immersed in my work.	0	1	2	3	4	5	6
l. I can continue working for very long periods of time.	0	1	2	3	4	5	6
m. To me, my job is challenging.	0	1	2	3	4	5	6
n. I get carried away when I am working.	0	1	2	3	4	5	6
o. At my job, I am very resilient, mentally.	0	1	2	3	4	5	6
p. It is difficult to detach myself from my job.	0	1	2	3	4	5	6
q. At my work I always persevere, even when things do not go well.	0	1	2	3	4	5	6

16. Depression, anxiety and stress

Please think about how you felt over the past week at work. If you have had a break from your primary role in the last week (for example holidays or temporary work assignment) please try to remember how you felt in the last week you were working in your primary role.				
	Did not apply to me at all.	Applied to me to some degree, or some of the time.	Applied to me to a considerable degree, or a good part of time.	Applied to me very much, or most of the time.
a. I found it hard to wind down.	0	1	2	3
b. I was aware of dryness of my mouth.	0	1	2	3
c. I couldn't seem to experience any positive feeling at all.	0	1	2	3
d. I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
e. I found it difficult to work up the initiative to do things.	0	1	2	3
f. I tended to over-react to situations.	0	1	2	3
g. I experienced trembling (e.g. in the hands).	0	1	2	3
h. I felt that I was using a lot of nervous energy.	0	1	2	3
i. I was worried about situations in which I might panic and make a fool of myself.	0	1	2	3
j. I felt that I had nothing to look forward to.	0	1	2	3
k. I found myself getting agitated.	0	1	2	3
l. I found it difficult to relax.	0	1	2	3
m. I felt downhearted and blue.	0	1	2	3
n. I was intolerant of anything that kept me from getting on with what i was doing.	0	1	2	3
o. I felt I was close to panic.	0	1	2	3
p. I was unable to become enthusiastic about anything.	0	1	2	3
q. I felt I wasn't worth much as a person.	0	1	2	3
r. I felt I was rather touchy.	0	1	2	3
s. I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat).	0	1	2	3
t. I felt scared without any good reason.	0	1	2	3
u. I felt that life was meaningless.	0	1	2	3

17. Burnout

	Strongly agree	Agree	Disagree	Strongly disagree
a. I always find new and interesting aspects in my work.	1	2	3	4
b. There are days when I feel tired before I arrive at work.	1	2	3	4
c. It happens more and more often that I talk about my work in a negative way.	1	2	3	4
d. After work, I tend to need more time than in the past in order to relax and feel better.	1	2	3	4
e. I can tolerate the pressure of my work very well.	1	2	3	4
f. Lately, I tend to think less at work and do my job almost mechanically.	1	2	3	4
g. I find my work to be a positive challenge.	1	2	3	4
h. During my work, I often feel emotionally drained.	1	2	3	4
i. Over time, one can become disconnected from this type of work.	1	2	3	4
j. After working I have enough energy for my leisure activities.	1	2	3	4
k. Sometimes I feel sickened by my work tasks.	1	2	3	4
l. After my work, I usually feel worn out and weary.	1	2	3	4
m. This is the only type of work I can imagine myself doing.	1	2	3	4
n. Usually, I can manage the amount of my work well.	1	2	3	4
o. I feel more and more engaged in my work.	1	2	3	4
p. When I work, I usually feel energised.	1	2	3	4

18. Psychosomatic complaints

What follows is a list of physical complaints. Please state how often each has happened to you in the last year.				
	Often	Sometimes	Rarely	Never
a. cramps in my legs	1	2	3	4
b. pains in my heart	1	2	3	4
c. tightness or heaviness in my chest	1	2	3	4
d. trouble breathing or shortness of breath	1	2	3	4
e. swollen ankles	1	2	3	4
f. pains in my back or spine	1	2	3	4
g. pains in my stomach	1	2	3	4
h. headaches	1	2	3	4
i. coughing or having heavy chest colds	1	2	3	4
j. stiffness, swelling, or aching in my joints or muscles	1	2	3	4
k. becoming very tired in a short time	1	2	3	4
l. having trouble getting to sleep	1	2	3	4
m. having trouble staying asleep	1	2	3	4
n. finding it difficult to get up in the morning	1	2	3	4
o. feeling my heart pounding or racing	1	2	3	4
p. hands sweating so that they feel damp and clammy	1	2	3	4
q. feeling nervous or fidgety and tense	1	2	3	4
r. being completely worn out at the end of the day	1	2	3	4
s. poor appetite	1	2	3	4

Note: When calculating scores for this scale, ratings were reversed so that higher scores reflected higher levels of psychosomatic complaints.

19. ICE investigator checklist

Please select any task you perform/ed as part of your ICE investigation role. Select as many as apply	
a. Searching publicly accessible websites for evidence of ICE material.	
b. Following leads supplied by the general public.	
c. Role playing as a child while interacting with a potential offender.	
d. Role playing an offender while interacting with a potential offender/s.	
e. Searching an alleged offenders financial records for incriminating evidence.	
f. Searching an alleged offenders data storage devices for incriminating personal communications.	
g. Physically searching an alleged offender's premises for incriminating evidence.	
h. Preservation of electronic evidence.	
i. Preservation of physical evidence.	
j. Searching data storage devices for the presence of ICE material.	
k. Identification of production/distribution/consumer supply chains from clues contained within confiscated material or records.	
l. Trying to follow production/distribution/consumer supply chains from clues contained within confiscated material or records.	
m. Classification of ICE material by content.	
n. Interviewing alleged offenders.	
o. Interviewing victims.	
p. Writing reports for use in legal proceedings.	
q. Identification of victims.	
r. Location of victims.	
s. Providing advice and assistance to non-specialist police units on how to identify, process and preserve evidence of ICE material.	
t. Collaboration with interstate ICE investigators.	
u. Collaboration with international ICE investigators.	
v. Collaboration with civilian professionals (e.g. lawyers, child safety workers or medical professionals).	
w. Performing administrative duties relevant to undertaking an ICE investigation.	
x. Participation in court proceedings.	
y. Providing social support to colleagues.	
z. Sharing job related knowledge with colleagues.	
aa. Participation in community education activities specific to ICE.	
bb. Participation in training activities specific to ICE investigation.	

20. Average ICE exposure

Please provide the number that best represents the requested average.	
a. On average, how many hours a week would you view ICE material?	
b. On average, how many consecutive hours would you spend viewing ICE material in a single sitting?	
c. On average, how many days a week would you view ICE material?	
d. On average, how many ICE images would you view in a week?	
e. On average, how many ICE images would you view in a shift?	
f. On average, how many ICE images would you view in a single sitting?	

21. ICE material disturbingness

In your opinion, how disturbing are these different types of ICE. material?						
	Never encountered	Not disturbing at all	Slightly disturbing	Moderately disturbing	Disturbing	Extremely disturbing
a. Non-erotic and non-sexualised material showing children in their underwear, swimming costumes etc. from benign sources such as family albums or children playing in normal settings, in which the context or organisation of pictures by the collector indicates inappropriateness.	0	1	2	3	4	5
b. Material showing a child being subjected to sexual assault, involving touching by an adult.	0	1	2	3	4	5
c. Material containing deliberately posed children fully clothed, partially clothed or naked (where the amount, context and organisation suggests sexual interest).	0	1	2	3	4	5
d. Material containing naked or semi-naked children in settings where minimal clothing is legal (e.g. nudist colonies or store catalogues).	0	1	2	3	4	5
e. Material which is predominantly written text.						
f. Material showing a child being tied, bound, beaten, whipped or otherwise subjected to something that implies pain.	0	1	2	3	4	5
g. Surreptitiously taken material showing children in play areas or other safe environments showing either underwear or varying degrees of nakedness.	0	1	2	3	4	5
h. Material containing deliberately posed children fully clothed, partially clothed or naked in sexualised or provocative poses.	0	1	2	3	4	5
i. Deliberately posed material emphasising genital areas where a child is either naked, partially clothed or fully clothed.	0	1	2	3	4	5
j. Material graphically portraying sexual assault involving penetrative sex, masturbation or oral sex involving an adult.	0	1	2	3	4	5
k. Material where an animal is involved in some form of sexual behaviour with a child.	0	1	2	3	4	5
l. Material where the video is accompanied by audio.	0	1	2	3	4	5
m. Live streaming video material.	0	1	2	3	4	5

22. Work practices and processes

The following questions ask about personal and organisational processes and practices you may have performed or experienced while working in ICE investigation.					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. I am able to pretend that the victims are not real people.	1	2	3	4	5
b. I am able to shut down my emotions and view the material objectively.	1	2	3	4	5
c. I avoid looking at expressive features such as the eyes.	1	2	3	4	5
d. I think of the ICE. material as evidence to be gathered and processed like any other type of evidence.	1	2	3	4	5
e. In our unit we have developed a unique sense of humour and in-jokes which helps break the tension.	1	2	3	4	5
f. It is impossible for an ICE investigator to develop an unprofessional interest in ICE material.	1	2	3	4	5
g. I have time at work to mentally prepare myself for viewing ICE. material before I begin viewing.	1	2	3	4	5
h. At my own discretion I am able to take a break if I feel myself becoming uncomfortable.	1	2	3	4	5
i. Sometimes I take a 'sickie' if I feel that viewing ICE. material is starting to get to me.	1	2	3	4	5
j. I am able to view ICE. material at the start of a shift and do other work later on.	1	2	3	4	5
k. At my own discretion, I can limit the amount of time (in each shift) that I am exposed to ICE. material.	1	2	3	4	5
l. I could tell if one of my co-workers had begun to use ICE. material for personal gratification.	1	2	3	4	5
m. At my own discretion, I am able to intersperse periods of viewing material with periods of work on other tasks.	1	2	3	4	5
n. In our unit we view ICE. material in pairs.	1	2	3	4	5
o. In our unit we view ICE. material alone.	1	2	3	4	5
p. In our unit we view ICE. material as a group.	1	2	3	4	5
q. In our unit we have a private area for viewing ICE. material.	1	2	3	4	5
r. I was gradually exposed to the more explicitly abusive material over time.	1	2	3	4	5
s. I sometimes have unwanted, intrusive sexual fantasies similar to the ICE material.	1	2	3	4	5
t. I have opportunities to sharpen my investigatory skills through additional training.	1	2	3	4	5
u. I have been taught how to use my computer and software as tools for ICE. investigation.	1	2	3	4	5
v. I have been taught how to perform all necessary steps of the ICE investigation process.	1	2	3	4	5
w. I volunteered for work as an ICE investigator because it pays more than my previous role.	1	2	3	4	5
x. I volunteered for work as an ICE investigator because it increases my chance of promotion.	1	2	3	4	5
y. In our unit, we would never discuss the possibility that one of our own could begin to like ICE material.	1	2	3	4	5
z. I volunteered to work in ICE investigation because it is a way in which I can have a positive impact on society.	1	2	3	4	5

22. Work practices and processes continued

aa. I did not volunteer to work in ICE investigation, but was assigned without regard for my personal preference.	1	2	3	4	5
bb. I can leave ICE investigation for another role without penalty or having to explain myself.	1	2	3	4	5
cc. My supervisor understands the unique pressures of ICE investigation.	1	2	3	4	5
dd. My supervisor understands how effective ICE investigations must be conducted.	1	2	3	4	5
ee. My supervisor provides support that increases my efficiency as an ICE investigator.	1	2	3	4	5
ff. I sometimes feel guilty about viewing ICE material, even though I am only doing so for my job.	1	2	3	4	5
gg. My organisation does not accord ICE investigation the importance it deserves.	1	2	3	4	5
hh. My organisation provides me with computer and software which are adequate for use in ICE investigation.	1	2	3	4	5
ii. My organisations pre-employment selection process ensures that only suitable people are engaged as ICE investigators.	1	2	3	4	5
jj. Before I formally accepted the role of ICE investigator I was shown a representative sample of the sorts of material I would be working with.	1	2	3	4	5
kk. I have heard it suggested that ICE investigation is not 'real' police work.	1	2	3	4	5
ll. I have heard it suggested that working in the ICE unit must mean I want to watch the material.	1	2	3	4	5
mm. My organisations employee assistance staff understand the unique pressures of ICE investigation.	1	2	3	4	5
nn. My organisations employee assistance staff understand how effective ICE investigation must be conducted.	1	2	3	4	5
oo. My organisations employee assistance staff tailors their support to suit the unique requirements of ICE investigators.	1	2	3	4	5
pp. If I were worried that one of my co-workers had developed an unprofessional interest in ICE material I would be able to get them help from inside my organisation.	1	2	3	4	5
qq. In my unit it is considered acceptable to seek psychological assistance if exposure to ICE material is becoming a problem.	1	2	3	4	5
rr. In my organisation ICE investigators are given useful assistance when they are moving into a more 'mainstream' police role.	1	2	3	4	5
ss. I sometimes feel concerned that I might develop an unprofessional interest in ICE material.	1	2	3	4	5
tt. Exposure to ICE material is the most difficult part of this job to deal with.	1	2	3	4	5
uu. I tend to identify with the victims.	1	2	3	4	5
vv. I enjoy the technical challenge involved in investigating ICE offending.	1	2	3	4	5
ww. Staff get more out of talking with their work colleagues within the unit about the problems they are experiencing than by talking to professional counsellors.	1	2	3	4	5
xx. I worry that an ICE investigator could get themselves into trouble by developing an unprofessional interest in ICE material.	1	2	3	4	5

23. Organisational strategies

The following items are strategies that an organisation could choose to implement as ways of protecting the occupational health of those involved in ICE investigation. Please provide the response that most accurately corresponds with the level of your agreement/disagreement.					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. ICE units should only employ police officers who volunteer to work in the unit.	1	2	3	4	5
b. ICE units should only employ officers with demonstrated competence as criminal investigators (not necessarily restricted to ICE).	1	2	3	4	5
c. There should be mandatory psychological evaluation of all incoming staff that are likely to be exposed to ICE material.	1	2	3	4	5
d. All incoming staff that are likely to be exposed to ICE material should be screened for life experiences that are known to increase vulnerability to harm from exposure to ICE material.	1	2	3	4	5
e. ICE unit supervisors should be screened for suitability for working with staff that have been exposed to ICE material.	1	2	3	4	5
f. Employee assistance providers should be screened for suitability for working with staff that have been exposed to ICE material.	1	2	3	4	5
g. How well an incoming staff member will fit in with existing personnel should be considered during the selection process.	1	2	3	4	5
h. All incoming staff that are likely to be exposed to ICE material should be shown a sample of 'typical' ICE material before they commence working in an ICE unit.	1	2	3	4	5
i. All incoming staff that are likely to be exposed to ICE material should be informed about the full range of known difficulties (physical, social and psychological) that have been experienced by ICE investigators.	1	2	3	4	5
j. All ICE staff should be able to transfer out of the unit to another area of investigation in the police – on their request.	1	2	3	4	5
k. There should be mandatory reassignment to another area of investigation after a fixed period of time.	1	2	3	4	5
l. There should be a maximum limit on the amount of material that can be viewed (within a shift).	1	2	3	4	5
m. All staff that have been exposed to ICE material should be allowed a sufficient amount of time to 'clear their head' before they go home.	1	2	3	4	5
n. Investigators should not be exposed to ICE material without another investigator being present.	1	2	3	4	5
o. There should be regular mandatory psychological evaluation of all staff who have been exposed to ICE material.	1	2	3	4	5
p. All psychological counselling and assessments of ICE staff should be conducted by outside professionals, not from within the police.	1	2	3	4	5
q. Staff should be forced to take holidays when they are due.	1	2	3	4	5
r. All ICE units should contain male and female investigators as this makes for a more supportive work environment.	1	2	3	4	5
s. Organisations should ensure that the ICE room is a pleasant place to be (e.g. spacious, attractively furnished, decorations, windows etc.) as physical comfort lessens psychological discomfort.	1	2	3	4	5
t. All staff that have been exposed to ICE material should be encouraged to talk with someone they trust about any difficulties they may be having.	1	2	3	4	5
u. Organisations should use image recognition software that scans, classifies and stores previously encountered ICE material without a person having to view it.	1	2	3	4	5
v. An overview of ICE investigation should be included in basic police training.	1	2	3	4	5

23. Organisational strategies continued

w. Supervisors should be educated about the realities of ICE investigation so that they will know how to support staff exposed to ICE material.	1	2	3	4	5
x. Employee assistance staff should be educated about the realities of ICE investigation so that they will know how to support staff exposed to ICE material.	1	2	3	4	5
y. ICE investigators should be given training that will increase their ability to provide each other with social support.	1	2	3	4	5
z. Information technology specialists working with ICE investigators should be given criminal investigation training.	1	2	3	4	5
aa. ICE investigators should be given training in information technology.	1	2	3	4	5
bb. ICE investigators should be given training in procedural matters that affect the likelihood of an offender being set free on a legal technicality.	1	2	3	4	5
cc. Organisations should prepare educational material suitable for building empathy within the families of all staff who have been exposed to ICE material.	1	2	3	4	5
dd. The value of ICE investigation should be promoted to all levels within the organisation.	1	2	3	4	5
ee. The organisation should increase the number of ICE investigators to make it easier to cope with the increasing workload in this area.	1	2	3	4	5
ff. The equipment used for ICE investigation should be regularly updated.	1	2	3	4	5

24. Characteristics associated with coping

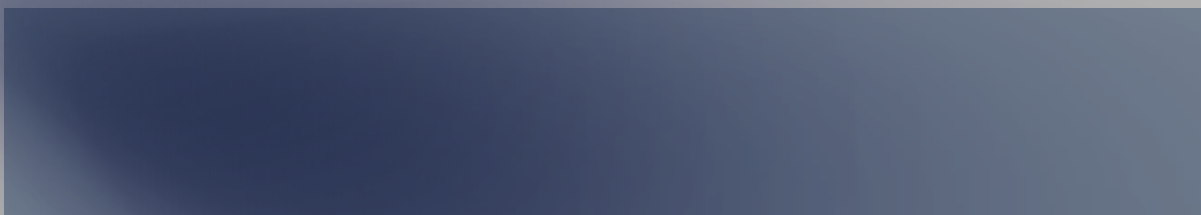
The type of person best able to cope with exposure to ICE material could be described as....					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. Male	1	2	3	4	5
b. Female	1	2	3	4	5
c. A parent with children similar to victims viewed in ICE material.	1	2	3	4	5
d. Someone who has never suffered an extreme adverse reaction when previously exposure to potentially traumatic events.	1	2	3	4	5
e. Someone who exercises regularly.	1	2	3	4	5
f. Someone who holds strong religious beliefs.	1	2	3	4	5
g. Someone who has been sexually abused at some point in their life.	1	2	3	4	5
h. Someone whose personal life is in good order (e.g. no financial problems, good personal relationships).	1	2	3	4	5
i. Someone without a history of impaired mental health prior to ICE exposure.	1	2	3	4	5
j. Someone without existing serious physical problems prior to ICE exposure.	1	2	3	4	5
k. Someone who is generally comfortable discussing sexual matters.	1	2	3	4	5
l. Someone who tends to be moralistic.	1	2	3	4	5
m. Someone who feels a high level of empathy with victims.	1	2	3	4	5
n. Someone who is generally emotionally stable.	1	2	3	4	5
o. Someone who can maintain emotional detachment from the victims without losing the capacity to care for them.	1	2	3	4	5
p. Someone who can separate what they experience at work from their life outside of work.	1	2	3	4	5
q. Someone who can cultivate a sense of humour that others may find overly dark or offensive but which never demeans the victims.	1	2	3	4	5
r. A sworn police officer.	1	2	3	4	5
s. Someone who believes that the protection ICE investigation provides to children is worth any discomfort the investigator may feel.	1	2	3	4	5

25. Job rotation

This question asks for your opinion on how long an investigator should be exposed to ICE material before being reassigned to other duties.					
	Up to 1 year	Up to 3 years	Up to 5 years	Up to 7 years	More than 7 years
a. How many consecutive years should an investigator be exposed to ICE material before being reassigned to other duties?	1	2	3	4	5

Thank you for completing the questionnaire.

References and Endnotes



References

- Ahart, G. (1982). *Sexual Exploitation of Children: A Problem of Unknown Magnitude Report to the Chairman, Subcommittee on Select Education, House Committee on Education and Labor*. Gaithersburg, MD: General Accounting Office.
- Bakker, A., van Veldhoven, M., & Xanthopoulou, D. (2010). Beyond the demand-control model: thriving on high job demands and resources. *Journal of Personnel Psychology, 9*(1), 3-16. doi: 10.1027/1866-5888/a000006
- Blanchard, E., Jones-Alexander, J., Buckley, T., & Forneris, C. (1996). Psychometric properties of the PTSD Checklist (PCL). *Behavioral Research & Therapy, 34*(8), 669-673. doi: 10.1016/0005-7967(96)00033-2
- Bokelberg, G. A. (n.d.). *Stress associated with investigating and working in support of investigations of internet sexual crimes against children*. Federal Bureau of Investigation. Washington D.C.
- Bowling, N., & Hammond, G. (2008). A meta-analytic examination of the construct validity of the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale. *Journal of Vocational Behavior, 73*(1), 63-77. doi: 10.1016/j.jvb.2008.01.004
- Burns, C., Morley, J., Bradshaw, R., & Domene, J. (2008). The emotional impact on and coping strategies employed by police teams investigating internet child exploitation. *Traumatology, 14*(2), 20-31. doi: 10.1177/1534765608319082
- Carayon, P., & Smith, M. (2000). Work organization and ergonomics. *Applied Ergonomics, 31*(6), 649-662. doi: 10.1016/S0003-6870(00)00040-5
- Davern, M., Cummins, R., & Stokes, M. (2007). Subjective wellbeing as an affective-cognitive construct. *Journal of Happiness Studies, 8*(4), 429-449. doi: 10.1007/s10902-007-9066-1
- de Jonge, J., & Dormann, C. (2006). Stressors, resources, and strain at work: A longitudinal test of the triple-match principle. *Journal of Applied Psychology, 91*(6), 1359-1374. doi: 10.1037/0021-9010.91.5.1359
- Demerouti, E., Bakker, A., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment, 19*(1), 12-23. doi: 10.1027//1015-5759.19.1.12

- Edelmann, R. (2010). Exposure to child abuse images as part of one's work: possible psychological problems. *Journal of Forensic Psychiatry & Psychology*, 21(4), 481-489. doi: 10.1080/14789940903540792
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing Company.
- Hart, P., & Cotton, P. (2002). Conventional wisdom is often misleading: Police stress within an organisational health framework. In M. Dollard & H. Winefield (Eds.), *Occupational stress in service professions* (pp. 103-139). London: Taylor & Francis.
- Humphrey, S., Nahrgang, J., & Morgeson, F. (2007). Integrating Motivational, Social, and Contextual Work Design Features: A Meta-Analytic Summary and Theoretical Extension of the Work Design Literature. *Journal of Applied Psychology*, 92(5), 1332-1356. doi: 10.1037/0021-9010.92.5.1332
- International Wellbeing Group. (2006). Personal Wellbeing Index. Retrieved from <http://www.deakin.edu.au/research/acqol/instruments/wellbeing-index/index.php>
- Internet Watch Foundation. (2010). 2010 Annual and Charity Report. Retrieved from <https://www.iwf.org.uk/assets/media/annual-reports/annual%20med%20res.pdf>
- Jenkins, P. (2001). *Beyond Tolerance: Child Pornography on the Internet*. New York: New York University Press.
- Jones, B., Pleno, S., & Wilkinson, M. (2012). The use of random sampling in investigations involving child abuse material. *Digital Investigation*, 9(s), 99-107. doi: 10.1016/j.diin.2012.05.011
- Krause, M. (2009a). In harm's way: Duty of care for child exploitation and pornography investigators. *FBI Law Enforcement Bulletin*, 78(1), 20-29. Retrieved from <http://search.proquest.com/libraryproxy.griffith.edu.au/docview/204154901?accountid=14543>
- Krause, M. (2009b). Identifying and managing stress in child pornography and child exploitation investigators. *Journal of Police and Criminal Psychology*, 24(1), 22-29. doi: 10.1007/s11896-008-9033-8
- Latapy, M., Magnien, C., & Fournier, R. (2009). Quantification of Paedophile Activity in a Large P2P System. Retrieved 12 December, 2011, from <http://antipaedo.lip6.fr>
- Linley, P., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress*, 17(1), 11-21. doi: 10.1023/B:JOTS.0000014671.27856.7e
- Lovibond, S., & Lovibond, P. (1995). *Manual for the Depression Anxiety Stress Scales* (2nd ed.). Sydney: Psychology Foundation.
- National Center for Missing and Exploited Children. (2005). *Child Porn Among Fastest Growing Internet Businesses*. Retrieved 20, December 2009, from http://www.missingkids.com/missingkids/servlet/NewsEventsServlet?LanguageCountry=en_US&PagelD=2064
- NewsFlavor. (2011). *British Man in Possession of Largest Collection of Child Pornography in History*. NewsFlavor. <http://www.newsflavor.com/alternative/british-man-in-possession-of-largest-collection-of-child-pornography-in-history/#ixzz1ZRvZUZ6k>
- Perez, L., Jones, J., Englert, D., & Sachau, D. (2010). Secondary traumatic stress and burnout among law enforcement investigators exposed to disturbing media images. *Journal of Police and Criminal Psychology*, 25(2), 113-124. doi: 10.1007/s11896-010-9066-7
- Perry, J. (1996). Measuring public service motivation: An assessment of construct reliability and validity. *Journal of Public Administration Research and Theory*, 6(1), 5-22. Retrieved from: <http://jpart.oxfordjournals.org/content/6/1/5.full.pdf+html>
- Peterson, M., Smith, P., Akande, A., Ayestaran, S., Bochner, S., Callan, V., Cho, N., Jesuino, J., D'Amorim, M., Francois, P., Hofmann, K., Koopman, P., Leung, K., Lim, T., Martazavi, S., Munene, J., Radford, M., Ropo, A., Savage, G., Setiad, B., Sinha, T., Sorenson, R., & Viedge, C. (1995). Role conflict, ambiguity and overload: A 21 nation study. *Academy of Management Journal*, 38(2), 429-452. doi: 10.2307/256687
- Quinn, R., & Shepard, L. (1974). *Quality of employment survey*. Ann Arbor: University of Michigan Institute for Social Research.
- Schaufeli, W., & Bakker, A. (2004). *Utrecht Work Engagement Scale: Preliminary Manual* (Version 1.1, December 2004). Retrieved from http://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test_manual_UWES_English.pdf
- Shane, J. (2010). Organizational stressors and police performance. *Journal of Criminal Justice*, 38(4), 807-818. doi: 10.1016/j.jcrimjus.2010.05.008

- Shill, M., & Lumley, M. (2002). The psychological mindedness scale: Factor structure, convergent validity and gender in a non-psychiatric sample. *Psychology and Psychotherapy: Theory, Research and Practice*, 75(2), 131-150. doi: 10.1348/147608302169607
- Sonnentag, S., Dormann, C., & Demerouti, E. (2010). Not all days are created equal: The concept of state work engagement. In A. Bakker & M. Leiter (Eds.), *Work engagement: Recent developments in theory and research* (pp. 25-38). New York, NY: Psychology Press.
- Spector, P., & Jex, S. (1998). Development of four self-report measures of job stressors and strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology*, 3(4), 356-367. doi: 10.1037/1076-8998.3.4.356
- Stevenson, J. (2007). Welfare considerations for supervisors managing child sexual abuse on line units. Unpublished doctoral dissertation. Middlesex University. London, UK.
- Taylor, M., Holland, G., & Quayle, E. (2001). Typology of paedophile picture collections. *The Police Journal*, 74(1), 97-107. Retrieved from: http://www.popcenter.org/problems/child_pornography/PDFs/Taylor_etal_2001.pdf
- Tedeschi, R., & Calhoun, L. (2004). Posttraumatic Growth: Conceptual Foundations and Empirical Evidence. *Psychological Inquiry*, 15(1), 1-18. doi: 10.1207/s15327965pli1501_01
- Tomyn, A., & Cummins, R. (2011). Subjective wellbeing and homeostatically protected mood: Theory validation with adolescents. *Journal of Happiness Studies*, 12(5), 897-914. doi: 10.1007/s10902-010-9235-5
- Tuckey, M., Bakker, A., & Dollard, M. (2012). Empowering Leaders Optimize Working Conditions for Engagement: A Multilevel Study. *Journal of Occupational Health Psychology*, 17(1), 15-27. doi: 10.1037/a0025942
- Tyler, T., & Blader, S. (2002). Autonomous vs. comparative status: Must we be better than others to feel good about ourselves? *Organizational Behavior and Human Decision Processes*, 89(1), 813-838. doi: 10.1016/S0749-5978(02)00031-6
- Tyler, T., & Blader, S. (2001). Identity and cooperative behavior in groups. *Group Processes & Intergroup Relations*, 4(3), 207-226. doi: 10.1177/1368430201004003003
- van Knippenberg, D., van Knippenberg, B., Monden, L., & de Lima, F. (2002). Organizational identification after a merger: A social identity perspective. *British Journal of Social Psychology*, 41(2), 233-252. doi: 10.1348/014466602760060228
- Weathers, F., Litz, B., Herman, D., Huska, J., & Keane, T. (1993). The PTSD Checklist: Reliability, validity, & diagnostic utility. Paper presented at the Annual Meeting of the International Society for Traumatic Stress Studies, San Antonio, TX.
- Wolak, J., & Mitchell, K. (2009). Work exposure to child pornography in ICAC tasks forces and affiliates. New Hampshire, United States: University of New Hampshire Crimes Against Children Research Center.
- Wortley, R., & Smallbone, S. (2012). *Internet Child Pornography: Causes, Investigation and Prevention*. Santa Barbara, CA: Praeger.
- Xanthopoulou, D., Bakker, A., Demerouti, E., & Schaufeli, W. (2007). The Role of Personal Resources in the Job Demands-Resources Model. *International Journal of Stress Management*, 14(2), 121-141. doi: 10.1037/1072-5245.14.2.121

Endnotes

- ¹ A report to the US House of Representatives (Ahart, 1982, p. 7) concluded: "As a result of the decline in commercial child pornography, the principal Federal agencies responsible for enforcing laws covering the distribution of child pornography - the U.S. Customs Service and the U.S. Postal Service - do not consider child pornography a high priority".
- ² Figures included in a report to the Illinois state legislature in 1980, cited by Jenkins (2001)
- ³ Wortley and Smallbone (2006, p. 53)
- ⁴ Latapy et al (2009)
- ⁵ NewsFlavor (2011)
- ⁶ Offender estimates exceeding a million are accepted by organisations such as the National Center for Missing and Exploited Children (2005)
- ⁷ Taylor, Quayle and Holland (2001)
- ⁸ Internet Watch Foundation (2010)
- ⁹ See Wortley and Smallbone (2012) for a discussion of these challenges.
- ¹⁰ Burns et al. (2008); Edelmann (2010); Krause (2009a, 2009b)
- ¹¹ Mitchell, Wolak and Finkelhor (2005)
- ¹² Edelmann (2010); Krause (2009a, 2009b)
- ¹³ Krause (2009b)
- ¹⁴ Bokelberg (n.d.)
- ¹⁵ Bokelberg (n.d.); Burns, et al. (2008); Wolak and Mitchell (2009)
- ¹⁶ Perez, Jones, Englert and Sachau (2010)
- ¹⁷ Bokelberg (n.d.); Perez and colleagues (2010)
- ¹⁸ Bokelberg (n.d.); Burns et al. (2008); Krause (2009a); Perez et al. (2010)
- ¹⁹ Linley and Joseph (2004); Tedeschi and Calhoun (2004)
- ²⁰ (Bokelberg (n.d.); Burns et al. (2008)
- ²¹ Burns et al. (2008, p. 29)
- ²² Bokelberg (n.d.); Perez et al. (2010); Stevenson (2007)
- ²³ Wolak and Mitchell (2009)
- ²⁴ Bokelberg (n.d.); Burns et al. (2008); Krause (2009a, 2009b); Wolak and Mitchell (2009)
- ²⁵ Krause (2009b)
- ²⁶ Bokelberg (n.d.); Burns et al. (2008); Krause (2009a, 2009b); Perez et al. (2010); Wolak and Mitchell (2009)
- ²⁷ Perez et al. (2010)
- ²⁸ Hart and Cotton (2002); Shane (2010)
- ²⁹ Bokelberg (n.d.); Perez et al. (2010)
- ³⁰ Bokelberg (n.d., p. 8)
- ³¹ Bokelberg (n.d.); Burns et al. (2008); Perez et al. (2010); Wolak and Mitchell (2009)
- ³² Bokelberg (n.d.); Burns et al. (2008); Krause (2009a, 2009b); Perez et al. (2010); Wolak and Mitchell (2009)
- ³³ Wolak and Mitchell (2009)
- ³⁴ Bokelberg (n.d.); Burns et al. (2008); Krause (2009a, 2009b); Perez et al. (2010)
- ³⁵ Bokelberg (n.d.); Krause (2009a, 2009b)
- ³⁶ Bokelberg (n.d.); Krause (2009a, 2009b)
- ³⁷ Bokelberg (n.d.); Krause (2009a, 2009b)
- ³⁸ Bokelberg (n.d.); Burns et al. (2008); Krause (2009a, 2009b)
- ³⁹ Bokelberg (n.d.); Burns et al. (2008); Perez et al. (2010); Wolak and Mitchell (2009)

40 Burns et al. (2008)

41 Bokelberg (n.d.); Burns et al. (2008); Krause
(2009a, 2009b); Perez et al. (2010); Wolak and
Mitchell (2009)

42 Of the 144 removed cases: 33 did not provide
any data beyond what was necessary to log
on, 40 were duplicate cases, and 71 cases
responded to some demographic questions but
no attempt made to progress further through the
questionnaire.

43 Cammann, Fichman, Jenkins and Klesh (1979), as
cited in Bowling and Hammond (2008)

44 Peterson et al. (1995)

45 Tyler and Blader (2001)

46 van Knippenberg, van Knippenberg, Monden and
de Lima (2002)

47 Tyler and Blader (2002)

48 The factor structure for the RJP scale was
investigated using principal components analysis
(PCA) with orthogonal rotation. The initial
solution resulted in two factors (KMO = .88)
accounting for 72.27% of the total variance.
Bartlett's Test of Sphericity ($\chi^2(66) = 3055.83$,
 $p < .001$) indicated that correlation matrix
was factorable. The two factors, a blending
of information accuracy and information
sufficiency items, represented information
about job requirements and information about
job attractiveness. A second PCA with was run,
specifying a three factor solution (as the scale
was originally intended to have) but the resulting
factors were difficult to interpret. Therefore the
two factor solution was used in analyses. The
Cronbach's $\alpha = .93$ for the job requirements scale
and $\alpha = .90$ for the job attractiveness scale.

49 Schaufeli and Bakker (2004)

50 International Wellbeing Group (2006)

51 Davern, Cummins and Stokes (2007);
International Wellbeing Group (2006); Tomy and
Cummins (2011)

52 Tomy and Cummins (2011)

53 Shill and Lumley (2002, p. 132)

54 Shill and Lumley (2002)

55 Perry (1996)

56 Tedeschi and Calhoun (2004)

57 Weathers, Litz, Herman, Huska and Keane (1993)

58 Blanchard et al. (1996)

59 Lovibond and Lovibond (1995)

60 Demerouti, Bakker, Vardakou and Kantas (2003)

61 Demerouti et al. (2003); Lee and Ashforth (1996)

62 Perez et al. (2010)

63 Quinn and Shepard (1974)

64 Bokelberg (n.d.); Burns et al. (2008); Krause
(2009); Wolak and Mitchell (2009)

65 Taylor, Holland and Quayle (2001)

66 Lovibond and Lovibond (1995)

67 A limitation of simple correlation is that it the
reported associations are unadjusted, that
is to say, they do not account for overlaps
among predictors. In order to determine the
unique contribution of each predictor variable
more sophisticated multivariate analyses (e.g.,
regression) are required. Such analyses are
considered to be beyond the scope of the current
report, but will be reported in later, more detailed
publications.

68 Glaser and Strauss (1967)

69 One police member, who had already left the child
exploitation area, admitted that he was personally
affected by the work at the time. However he
did not attribute blame to the organisations but
rather his own inability to find coping strategies
that worked for himself in that role.

70 Four other participants had also left the ICE area,
or were in the process of doing so, however this
was reportedly not related to mental health.

71 Bokelberg (n.d.); Burns et al. (2008); Krause
(2009); Perez et al. (2010)

72 Krause (2009); Wolak and Mitchell (2009)

73 Bokleberg (n.d.); Burns et al. (2008)

74 Bokelberg (n.d.); Burns et al. (2008); Krause
(2009); Wolak and Mitchell (2009)

75 Bokelberg (n.d.); Burns et al. (2008); Krause
(2009); Wolak and Mitchell (2009)

76 Tuckey et al. (2012)

77 Krause (2009)

78 See Jones et al. (2012) for a description of the
Discovery Process used by the New South Wales
Police Force State Electronic Evidence Branch

79 Carayon and Smith (2000); de Jonge and
Dormann (2006); Humphrey, Nahrgang and
Morgeson (2007); Spector and Jex (1998)

80 Sonnentag et al. (2010)

81 Bakker, van Veldhoven and Xanthopolou (2010);
Xanthopolou, Bakker, Demerouti and Schaufeli
(2007)

82 Bokelberg (n.d.); Burns et al. (2008); Krause
(2009); Perez et al, (2010)

