Appendix A – Academic research

Secondary investigator research		
Author, year and title.	Participants and sample size.	Main findings and themes
Boag-Munroe, (2017) Police Federation of England & Wales (PFEW) Detectives Survey	A survey of 7803 detectives nationally	The survey found that 48% of respondents said that they found their work either very or extremely stressful, with 53% stating that they were experiencing increased feelings of fatigue. When asked about the nature of the stress that they were experiencing most agreed that their job was stressful because there are high levels of personal responsibility, including the nature of the work being highrisk (80%), emotionally demanding (71%) and due to exposure to traumatic or distressing incidents and material (64%). 48% also said that they felt emotionally drained from work either most or all of the time with 91% of those who had taken sickness absence due to their mental health and wellbeing stating that the difficulties they experienced were caused, or made worse, by work.
Gray, C. & Rydon-Grange, M. (2019) Individual characteristics, secondary trauma and burnout in police sexual and violent offending teams	78 police 'staff' from several specialist sexual and violent offending teams in North Wales.	This study had three distinct questions looking at secondary trauma, burnout and compassion satisfaction in officers and asking whether the levels vary by gender, length of service, and what attachment style and individual characteristics are most associated with secondary trauma, burnout, compassion satisfaction and mental ill-health. The findings found there to be no more than mild or average levels on all three concepts with no significant gender differences found. Weak associations with secondary trauma and burnout were found with length of service in the current role. Increased levels of secondary trauma, burnout and mental ill-health, were associated with increased levels of attachment insecurity, although these findings should be treated with caution due to the scale being used designed for measuring romantic relationships and not for this type of study. In relation to the individual characteristics (psychological resilience variables), these were significantly associated with decreased levels of secondary trauma, burnout and mental ill-health and increased levels of compassion satisfaction.
Hurrell, A-K., Draycott, S. & Andrews, L. (2018).	101 child abuse investigation police officers in England and Wales.	The authors approached all 43 police forces in England and Wales, but only 12 agreed to participate. Of those 12 forces the number of child protection officers varied from 12 – 75 in total. Only 146 agreed to start the research but after those who opened the survey but didn't start (35)

Secondary traumatic stress in police officers investigating childhood sexual abuse.		and incomplete data were removed (10) that left only 101 officers. The initial findings were 35% the officers (n= 35) would meet the criterion for PTSD, with 12% of the officers (n=12) meeting the criterion for anxiety and 6% (n=6) meeting the criteria for depression; a small, positive correlation was found which between the number of interviews conducted with higher levels of STS, but no relationship was found between amount of time in CAIU and levels of STS, and a significant relationship was found between both depression, anxiety and both positive and negative coping styles and STS.
MacEachern, A. D., Dennis, A. A., Jackson, S. & Jindal- Snape, D. (2019). Secondary Traumatic Stress: Prevalence and Symptomology Amongst Detective Officers Investigating Child Protection Cases.	63 detectives involved in child protection cases in a UK police force.	This mixed methods study looked to examine gender differences and prevalence of secondary traumatic stress (STS) amongst police officers in the UK No gender differences in levels of STS within the sample of officers (34 female & 29 male officers). Half the participants experienced little or no STS (although half were experiencing some STS symptoms, with three scoring high and four were classified as severe). From the qualitative results the participants reported feeling burnt-out; sleeping difficulties as well as experiencing an altered emotional response to the work and changes in empathy towards complainers and witnesses.
Parkes, R., Graham- Kevan, N. & Bryce, J. (2018a) 'I put my "police head" on': Coping strategies for working with sexual offending material.	11 officers working in sexual offence investigation in England.	This qualitative study sought to understand the unique and individual responses that police officers experience when exposed to sexual offence material (SOM) and was comprised of 11 police officers from the same UK police force who were regularly exposed to SOM. The coping strategies largely fell into three main categories, avoidance through minimising exposure; cognitively detaching from the offence or victim and focusing on the process of investigation to shield against personal thoughts and feelings.
Parkes, R., Graham- Kevan, N., & Bryce, J. (2018b). You don't see the world through the same eyes anymore: The impact of sexual	11 officers working in sexual offence investigation in England.	This qualitative study is a follow on from the earlier study whereby the authors sought to understand the unique and individual responses that police officers experience when exposed to sexual offence material This study used a two-stage interpretative model of analysis. Firstly, Interpretative Phenomenological Analysis (IPA) was used to gather the data and conduct the initial

offending work on police staff.		identification of themes. There was then a second stage where the theme 'Impact of the role', was subject to further interpretive study, by examining thematic links within clinical models of traumatic stress: Vicarious Traumatisation (VT) and post-traumatic stress disorder (PTSD). This study had a number of themes and subthemes. The largest theme was the 'impact of the role' with the following 'sub-themes' which included desensitisation (to the material); personality changes; increased cynicism or suspicion; intrusive thoughts and images; indelible memories of cases; hiding the negative impact and looking ahead with fear, dread and trepidation.
Tehrani, N. (2016). Extraversion, neuroticism and secondary trauma in Internet child abuse investigators.	126 internet child abuse investigators from 2 UK police forces.	Although there were some findings of STS, clinical levels were lower than previous research suggested, and female investigators suffered more than their male colleagues. The study also supported that higher levels of neuroticism and emotional instability were associated with increased levels of secondary trauma, anxiety, depression, burnout, and PTSD. The author was unclear why there were lower levels of STS than expected but the authors suggested that the use of volunteers to form the teams, an improved culture with an understanding management structure (sergeants and inspectors) made for a supportive team environment. It is also possible that the introduction of pre-employment screening and support sessions increased awareness of the potential dangers regarding the nature of the work and allowed the formation of coping strategies and increased resilience.
Tehrani, N. (2018). Psychological wellbeing and workability in child abuse investigators.	2294 child abuse investigators over seven police forces, over a three-year period (surveillance screening)	The study involved seven police forces that had introduced psychological screening for their child abuse investigators, and was a three year cross-sectional quantitative study which looked to assess the impact of tenure and workability on levels of primary and secondary trauma; the impact of 'adverse childhood experiences (ACE's) on traumatic stress symptoms and to see if there were gender differences on levels of trauma. The findings from this study suggest that staying in role longer (tenure) caused CAIs to experience increased levels of primary trauma. It also demonstrated that all four independent variables (gender, tenure (time in the role), workability and the number of ACEs) impacted on mental health of CAIs with workability and ACE scores being the strongest predictors.

The impact of ACE's was significant as those investigators with more ACE's had higher levels of anxiety, depression and an increased incidence of primary but not secondary trauma. The impact on primary trauma is expected but the fact that the impact of ACE does not impact on secondary trauma was not expected by the author who hypothesised that this may be explained working in child abuse investigations may re-trigger responses to their own unresolved childhood traumas rather than create a secondary trauma response.

It was also recommended that CAI's should be psychology assed for ACE's and educated regarding potential risks of the role and where to seek support.

Turgoose, D., Glover, N., Barker, C. & Maddox, L. (2017).

Empathy, compassion fatigue, and burnout in police officers working with rape victims. 142 officers involved in rape investigation in London.

This was a cross sectional, quantitative study involving 142 Police officers from the Metropolitan Police Sexual Offences, Exploitation and Child Abuse (SOECA) Command This research involved training and questionnaires which looked to examine levels of compassion fatigue, secondary traumatic stress and burnout in specialist police officers who work with victims of rape and sexual assault; the impact of tenure and the role of empathy.

The study found that there was minimal evidence of compassion fatigue, secondary traumatic stress or burnout in those that took part. 84% of scores for compassion fatigue were low with 16% being average and none as high. For burnout 33% of scores were low, with 67% being average and again none ranked as high. For secondary traumatic stress 74% were no, little or mild secondary traumatic stress, with 11% moderate, 8% high, and 8% severe. For factors such as age, sex and ethnicity, no significant relationships were found with levels of compassion fatigue, secondary traumatic stress and burnout.

Those who had more time in the role had higher levels of compassion fatigue, secondary traumatic stress and burnout scores, than those relatively new to the role, yet this was not with years of overall experience. The authors suggest that this disparity may suggest that there is something particular to working with rape victims compared to other types of police work which may have an effect. Those officers working with adults also had higher levels of secondary traumatic stress and burnout than those working with children, but no significant differences for compassion fatigue were experienced.

Wellington, (2021)

PFEW Officer Demand, Capacity and Welfare Survey 2020 Detectives' Report This report was part of the overall survey where detective data was extracted from the 12,471 responses, with 3,469 responses being received from officers who identified themselves as detectives.

In summary the results were generally positive as 72% of respondents indicated that their overall health was good or very good. However;

- 34% indicated that their morale was low or very low with 37% stating that they viewed their job as very or extremely stressful.
- 78% indicated that they had experienced feelings of stress, low mood, anxiety, or other difficulties with their health and wellbeing over the last 12 months.
- 64% reported that their workload is currently too high, or much too high. 95% reported that, they had attended to the victim(s) of serious sexual assault at least once in the line of duty; 96% said that, they had seen the body of a person who has died a violent or unnatural death, with 62% stating that, they had to view large volumes of child sexual abuse imagery at least once in the line of duty.
- 65% reported presenteeism associated with their physical health with 66% reported presenteeism associated with their psychological health.
- 29% reported leaveism associated with their physical health, whilst 42% reported leaveism associated with their psychological health.
- 77% reported being aware of reactive services that their force offers to support the mental health and wellbeing of its employees, with 46% reporting being aware of proactive services that their force offers to support the mental health and wellbeing of its employees.

Police Officer research (not specific to Detectives)

Brewin, Miller, Soffia, Peart and Burchell (2020).

Posttraumatic stress disorder and complex posttraumatic stress disorder in UK police officers In total, 10 401 serving police officers self-identified as having been exposed to traumatic events.

The main findings were that there was a prevalence of 8% in relation to PTSD and a prevalence of 12.6% in relation to CPTSD.

It was found that both disorders were more common in male officers, with CPTSD being more prevalent in lower ranks and those with more years of service.

Brown, J., Fielding, J. & Grover, J. (1999).

Distinguishing traumatic, vicarious and routine operational stressor exposure and attendant adverse consequences in a sample of police officers.

593 English police officers from a large provincial police force.

The main findings of this study were categorized as traumatic, routine and vicarious stressors. Traumatic stressors may occur when dealing with death or disaster. These tend to have a significant impact but are rare. Routine stressors include dealing with victims and the potential for violence and injury within the role. These tend to have a lower impact on the officers but are more frequent. The third stressor was conceptualized as Vicarious and occurred when dealing with victims of rape and sexually abused children. These were caused by relatively frequent exposure to such crimes and may have a significant impact on the officers leading to secondary traumatic stress.

Themes that were highlighted from the study included more than 40% of those surveyed scored at or over the threshold value on the GHQ (12), which is an indicator of psychological distress, and those dealing with victims of rape and child abuse may lead to vicarious trauma needing professional intervention. The informal police occupational culture may make it difficult for male officers to be honest regarding how something traumatic has impacted on them, and social support can decrease the likelihood of suffering psychological distress in officers.

Burnett, M. E., Sheard, I. & St Clair-Thompson, H. (2019)

The prevalence of compassion fatigue, compassion satisfaction and perceived stress, and their relationships with mental toughness, individual differences and number of self-care actions in a UK police force.

605 participants, all of whom were staff, officers or volunteers within a UK police force from North East of England.

This study aimed to develop a comprehensive understanding of the consequences of stress associated with police work. It identified that that 20% of those surveyed suffered from the 'negative effects' of police work with stress and compassion fatigue, with males having higher levels than females.

Cartwright, A & Roach, J. (2020).

The wellbeing of UK police: a study of recorded absences from work of UK police employees due to psychological

This research was based on an initial FOI request to all 46 police forces in England and Wales, Police Scotland and PSNI. This study analysed sickness absence data recorded for 20 UK Police services for the past 10 years, obtained under the Freedom of Information (FOI) Act. The data set represents some 57% of UK police personnel, and findings suggest that police employee absence due to psychological ill health, trauma, and stress had nearly doubled in the past 10 years to an absence rate of 8.82%. Furthermore, this study found that 39% of those who take

illness and stress using freedom of information act data.		a first leave of absence due to mental ill health go on to take further absences from work. The study was able to demonstrate that 56% of the psychological sick leave complaints related to mental health issues categorized as stress, 37% anxiety and depression, and 7% related to other complaints. Constables accounted for the high percentage of employees taking sick leave, as well as a disproportionate percentage of female police employees being absent
Demou, E., Hale, H., & Hunt, K. (2020). Understanding the mental health and wellbeing needs of police officers and	30 Superintendents and eight stakeholders from Police Scotland.	from work, compared with their male counterparts. Face-to-face/telephone interviews were conducted with Interview topics including Mental Health (MH) issues; health/health behaviours; employment; and potentially beneficial workplace interventions. A thematic analysis approach was adopted. High levels of occupational stress and anxiety, currently or in the past,
staff in Scotland.		were reported, as were experiences of PTSD, anxiety and depression. The main work-related stressors perceived to contribute to MH issues were job role, working hours/workload and organisational culture. Aligned with recent literature, organisational, as opposed to operational, stressors were reported by officers and staff to be the key stressors. The impact of significant organisational change (i.e. PSoS merged into a single police force in 2013) and the ways in which this change was applied were still were seen to be the cause of a number of organisational stressors.
		Stigma associated with MH in the workplace still prevents officers from being open about the challenges they are experiencing, although the stigma was not perceived to be as extreme as it once was Officers and staff recognised progress towards promoting and managing MH in the service but identified interventions, including training, counselling, and environmental workplace changes as needed to address mental health issues within police cultures.
Evans, R., Pistrang, N. & Billings, J. (2013) Police officers' experiences of	19 police officers from both Birmingham and London.	This study took a qualitative approach in order to understand the experiences of both supportive and unsupportive interactions following exposure to traumatic incidents in police officers but had NOT developed PTSD. The aim of the study was to understand the types of support processes that might promote resilience in police

supportive and unsupportive social interactions following traumatic incidents.		officers exposed to trauma including experiences of supportive and unsupportive interactions following trauma. It used thematic analysis (Braun & Clarke, 2006) to identify 'patterns and meanings' from the accounts given by 19 police officers who were interviewed through semi structured interviews. Three key domains and themes emerged
		Dilemmas of talking (We don't need to talk; talking is risky & don't bottle up: "talk, talk, talk"); the work context (Informal interactions with colleagues and formal sources of support - humour and banter; 'dip in and dip out' of chat & formal opportunities to talk) and support outside work (a close relationship with someone who cares & protecting others). The impact of police culture and an officer's ability to be 'honest' about the impact of suffering from trauma was a significant finding of this study
Jackman, P., Coussens, A., Clay, G., & Henderson, H. (2019).	381 employees of a police force in the Midlands region.	This study found that psychological wellbeing was significantly and positively associated with perceived support , received support , extraversion, agreeableness, conscientiousness, emotional stability and openness to experience.
An examination of social support, personality and psychological wellbeing in police employees.		The current findings advance understanding of the association between psychological wellbeing and received and perceived support, and personality in police employees. Both received and perceived support significantly predicted psychological wellbeing, demonstrating that employees that received more support from colleagues, and perceived support to be more readily available from colleagues, had elevated psychological wellbeing.
		Furthermore, the personality traits of extraversion and emotional stability significantly predicted psychological wellbeing, such that employees characterized by greater levels of these traits reported enhanced psychological wellbeing.
Jackman, P. C.,	A sample of 381 police	Psychological wellbeing was significantly and positively
Henderson, H., Clay, G., & Coussens, A. H. (2020).	employees from a county police force in England.	associated with perceived support from colleagues, received support from colleagues, extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Further investigation of these
The relationship between psychological wellbeing, social		relationships using multiple logistic regression analysis found that perceived support from colleagues, received support from colleagues, extraversion, and emotional stability significantly predicted psychological wellbeing.

support, and The results suggest that increasing both perceptions of personality in an English police force. available support and the amount of support received among employees in police forces is important for enhancing psychological wellbeing in this population. The main findings were that participants discussed the Lennie, Crozier and 7 police officers (2 Sutton. (2019). Detective Constables, 2 impact of incidents of violence or threat of violence, Detective Sergeants, 3 offences involving children, or lack of support within the Robocop - The Uniform Constables and 2 organization. All participants articulated high levels of Uniform Sergeants), from distress at some point. depersonalisation of police officers and front line response their emotions: A policing, child protection, However, they also reported a perception of rules around diary study of offender management, emotional expression as an unofficial performance emotional labour custody, sexual offences measure, with emotional display highly correlated with an and burnout in front unit, and divisional CID. inability to undertake the role effectively. The author also line British police suggested that this reflected the enduring masculine officers. policing culture. All but one of the participants displayed an element of burnout. One significant finding of this study is that officers deliberately choose emotional distancing and depersonalisation as a form of coping and are cognizant of engaging this strategy. The study has been able to capture inner cognitive processing which has been lacking in other similar studies. It is suggested this study has highlighted that there is a gap in the understanding of police culture and the way that the Police process their emotions. Sheard, I., Burnett, 602 Police officers from a This was a study looking to explore experience and views M. E. & St Clair-North Eastern police of mental health problems, stress and distress in police Thompson, H. (2019) force. employees working in ten different roles, within a North Eastern police force. **Psychological** distress constructs in The initial findings were that many police personnel had police with different previously experienced mental health problems with all roles. roles believing that working for the police has had a negative impact on their mental health; employees who worked shifts had significantly higher levels of perceived stress, than those who did not work shifts; 24/7 officers reported higher levels of compassion fatigue and lower levels of compassion satisfaction than individuals in several other roles; resolution without deployment officers reported higher levels of secondary traumatic stress than those in other roles (although there should be caution regarding low numbers of responses) and firearms officers had lower levels of perceived stress and anxiety than individuals in some other roles (although there should be caution regarding low numbers of responses).

Stevelink, S.A.M., Opie, E., Pernet, D., Gao, H., Elliott, P., Wessely, S. et al. (2020)

Probable PTSD, depression and anxiety in 40,299 UK police officers and staff: Prevalence, risk factors and associations with blood pressure. The sample included 40,299 police staff, police constable, sergeants and inspectors or above.

Data were used from the Airwave Health Monitoring Study which was established to monitor the possible physical health impacts of a new communication system on police employees. Data included sociodemographic characteristics, lifestyle habits, depression, anxiety, and post-traumatic stress disorder (PTSD) symptoms and blood pressure.

Probable depression was most frequently reported (9.8%), followed by anxiety (8.5%) and PTSD (3.9%). Groups at risk for probable mental disorders included police staff, and police employees who reported drinking heavily.

Police employees exposed to traumatic incidents in the past six months had a doubling in rates of anxiety or depression and a six-fold increase in PTSD compared to those with no recent trauma exposure