Empathy and compassion fatigue in specialist police officers working with victims of rape and sexual assault: Assessment and brief training intervention

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Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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Overview

This thesis investigated compassion fatigue, secondary traumatic stress and burnout in different helping professionals.

Part 1, the literature review, examined predictors of compassion fatigue in mental health professionals. A total of 32 papers were reviewed. A number of different factors were found to predict compassion fatigue, although findings were inconsistent. The strongest predictor was the participant's own trauma history, and there was some evidence to suggest that mindfulness might serve as a protective factor against compassion fatigue.

Part 2, the empirical paper, investigated empathy, compassion fatigue, secondary traumatic stress and burnout in police officers who work with victims of rape. No associations were found between either dispositional or situational empathy and compassion fatigue and secondary traumatic stress. High dispositional empathy was associated with low burnout. Compassion fatigue, secondary traumatic stress and burnout all increased the longer officers had worked in that role. A training intervention was found to be effective in increasing knowledge and awareness of compassion fatigue, secondary traumatic stress and burnout, and introduced officers to self-help strategies for managing stress. This paper forms part of a joint research study conducted with Naomi Glover (Glover, 2015; Trainee Clinical Psychologist, University College London).

Part 3, the critical appraisal, discusses working with the police, difficulties in defining some of the key constructs investigated in the study, and the potential wider implications of conducting research in this area.

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Part One

Literature review

Predicting compassion fatigue in mental health professionals

Abstract

Aims: Compassion fatigue can seriously compromise the ability of mental health professionals to carry out their roles. It is partly manifested in a reduction in experiencing empathy with clients; something which has consistently been thought of as crucial in delivering effective mental health services. This review aimed to investigate common predictors of compassion fatigue in mental health professionals.

Method: Following a systematic search of four databases (PsycINFO, PUBMED, CINAHL and PILOTS) and a hand search of two relevant journals, 32 studies met inclusion criteria for review.

Results: The studies were cross-sectional in design. A number of different variables were associated with compassion fatigue. The most commonly associated variables were condensed into 11 categories: gender, age, experience, trauma history, empathy, mindfulness attitudes, coping style, religion, caseload, burnout and compassion satisfaction. The strongest predictor of compassion fatigue was the participant's own trauma history. There was emerging evidence of coping strategies that predicted compassion fatigue, as well as the potential for interventions such as mindfulness to be used as a protective factor against compassion fatigue.

Conclusions: Experimental research is required in order to robustly investigate the relationships found between compassion fatigue and other variables. There is potential for the results of such research to increase knowledge and awareness of what predicts compassion fatigue, as well as how mental health professionals might prevent it.

Introduction

Professionals who work with highly distressed clients, such as those who have experienced trauma, are at risk of developing compassion fatigue as a result of their work (Figley, 1995). Compassion fatigue has been described as the empathic strain and general exhaustion resulting from dealing with people in distress over time (Figley, 1995). It is characterised by physical and emotional exhaustion and a pronounced reduction in the ability to feel empathy and compassion for others (Elwood, Mott, Lohr & Galovski, 2011; Mathieu, 2007).

Compassion fatigue has also been described in relation to *secondary traumatic stress*, which is defined as the psychological distress that can occur from hearing the details of another person's trauma. Characteristics of secondary traumatic stress closely resemble those of Post-Traumatic Stress Disorder (PTSD) and include symptoms of hyperarousal, avoidance and intrusive thoughts or memories relating to the trauma of another (see Bride, 2004).

While compassion fatigue and secondary traumatic stress are terms that are often used interchangeably, subtle differences exist between them. Compassion fatigue is sometimes referred to as just another term to describe secondary traumatic stress (Figley, 1995). Others however have suggested that compassion fatigue is characterised more by its effects, such as the loss of capacity or interest in in being empathic towards clients and the exhaustion that comes with helping those in distress (Elwood et al., 2011).

Compassion fatigue is prevalent in helping professionals more generally, and is not specific to those who work with trauma. For example, studies have investigated the prevalence of compassion fatigue in mental health professionals

(Zeidner et al., 2013), nurses (Hegney, 2014), doctors (Gleichgerrcht & Decety, 2014), social workers (Simon, Pryce, Roff & Klemmack, 2005), chaplains (Yan & Beder, 2013), and various emergency services workers (Cicognani, Pietrantoni, Palestini & Prati, 2009).

Compassion fatigue has also been described in relation to *burnout*, which is psychological and emotional exhaustion, associated with feelings of hopelessness and difficulties in dealing with work or in doing your job effectively, sometimes in the context of high workloads or a non-supportive work environment (Stamm, 2010). It is also associated with a reduction in a sense of professional accomplishment (Maslach, 1982).

Despite the fact that each of these terms have been described as separate constructs with unique characteristics (Elwood et al., 2011), some researchers have suggested that they are not clearly distinct from each other (Jenkins & Baird, 2002). Others have suggested that they are linked in other ways, for example a combination of burnout and secondary traumatic stress together make up the construct of compassion fatigue (Stamm, 2010). Despite this definitional uncertainty, what is consistent is the notion that compassion fatigue can make it harder for health professionals to carry out their roles with empathy and compassion. It is a concept that is widely researched and becoming a topic of interest in certain helping professions (see Yang & Kim, 2012 for a review of compassion fatigue in nurses), and will be the central focus of this review.

In contrast to compassion fatigue, the term *compassion satisfaction* has been used to describe the positive aspects of working in helping professions. Compassion satisfaction is defined as the pleasure derived from helping, affection

for colleagues, and a good feeling resulting from the ability to help and make a contribution (Figley & Stamm, 1996, cited in Conrad & Kellar-Guenther, 2006).

Compassion fatigue in mental health professionals

The ability to display compassion has recently been the subject of national focus, with the serious incidents in mid-Staffordshire NHS Trust resulting in an investigation and report which highlighted how severe the consequences of a lack of compassionate care can be (Francis, 2013). The Government's response to the Francis report recommended that compassion is essential in providing effective healthcare (Department of Health, 2013). However, studies have suggested that compassion fatigue can occur in a range of mental health professionals and settings, such as psychologists (Aukstinaityte & Zajanckauskaite-Staskeviciene, 2010), psychiatric nurses in forensic units (Lauvrud, Nonstad & Palmstierna, 2009), trauma therapists (Killian, 2008), mental health counsellors (Thompson, Amatea & Thompson, 2014), and telephone counsellors (O'Sullivan, Thomas & Whelan, 2011). Clinical social workers in the USA, who often carry out therapy, can also be at risk of compassion fatigue (e.g. Thomas & Otis, 2010).

In his etiological model of compassion fatigue in psychotherapists, Charles Figley proposes that empathy plays a key role in the development of compassion fatigue (Figley, 2002). The model is based on the assumption that empathy is an important factor in developing a good therapeutic relationship and delivering an effective intervention (Figley, 1995). It suggests that through their empathic response, therapists experience the emotional distress of a client, but on the other hand that this contributes directly to the development of compassion fatigue.

The notion of empathy being regarded as crucial in the therapeutic process is longstanding. Carl Rogers outlined six 'Necessary and Sufficient Conditions of Therapeutic Personality Change' (Rogers, 1957), which he suggested were essential for psychotherapeutic change. Two of these conditions regarded empathy, in that the therapist must both experience and communicate to the client an empathic understanding of their problem. The importance of empathy has also been detailed in more recent models of psychological treatment, such as the role of 'empathic listening' within the Socratic questioning techniques in Cognitive Behavioural Therapy (CBT; see Padesky & Greenberger, 1995).

Measuring compassion fatigue

The Professional Quality of Life Scale (ProQOL)

The main way in which compassion fatigue is operationalised is via the ProQOL (Stamm, 2010). The ProQOL is a 30 item self-report scale consisting of three subscales measuring compassion fatigue, compassion satisfaction and burnout. The measure asks participants to answer items in relation to the last 30 days. ProQOL items include *"I find it difficult to separate my personal life from my life as a [helper]"* (compassion fatigue), "*I feel worn out because of my work"* (burnout) and *"I believe I can make a difference through my work"* (compassion satisfaction).

The ProQOL was adapted from a variety of earlier compassion fatigue measures, for example the Compassion Satisfaction and Fatigue Test (Figley & Stamm, 1996), Compassion Fatigue Self-Test (Stamm & Figley, 1996), and Compassion Fatigue Scale – Revised (Figley, 1995). Psychometric properties have been demonstrated, including construct and discriminant validity (Adams, Boscarino

& Figley, 2006). For ease of reference in this review, these measures will be referred to using the acronym *CFST* (see Table 2).

The current review

While previous studies have reviewed the literature on compassion fatigue in other professions (e.g. Yang & Kim, 2012), no such review exists relating to mental health professionals. One previous paper has reviewed the literature on secondary traumatic stress, vicarious traumatisation, traumatic countertransference, burnout and compassion fatigue, but specifically relating to professionals who work with individuals who have experienced trauma (Collins & Long, 2003). A search of the Cochrane Library yielded no results for 'compassion fatigue'.

Given the significant role of empathy in the work of mental health professionals, it seems important to understand what factors may increase the likelihood of a mental health professional developing compassion fatigue. The current review therefore addresses the following question:

- What demographic and psychological factors are associated with compassion fatigue in mental health professionals?

Method

Inclusion and exclusion criteria

Studies were included in the review if they:

- Were quantitative studies which investigated predictor or correlational variables of compassion fatigue (including studies that measured burnout or secondary traumatic stress alongside compassion fatigue).
- Used validated measures of compassion fatigue, i.e. ProQOL or CFST.
- Had participants who were in a mental health-related profession (including psychiatric nurses and other mental health workers, psychologists and other therapists, psychiatrists, and social workers). Studies that looked at compassion fatigue in the general public were excluded.
- Had a cross-sectional, correlational, experimental or quasi-experimental design.
- Were published in peer reviewed journals.
- Were published in English or where a translation into English was available.

Search strategy

In line with search strategy recommendations by Petticrew and Gilbody (2004), lists of synonyms of each of the topics of interest were drawn up to create an overall list of search terms. This included synonyms relating to predictor variables and of the target populations. The term 'compassion fatigue' was included as a stand-alone search term, as opposed to including similar terms such as secondary traumatic stress or vicarious traumatisation. The final search included the following terms:

compassion fatigue

AND

(predict OR risk factor* OR risk OR cause* OR correlate* OR susceptible OR susceptibility OR protect* OR resilience OR vulnerable OR vulnerability)*

AND

(mental health nurse OR psychiatric nurse* OR mental health professional* OR therapist* OR psycholog* OR counse?lor OR mental health physician* OR mental health professional* OR psychiatr* OR social worker* OR psychotherapist*)*

A systematic search was conducted using four electronic databases: PsycINFO, PUBMED, CINAHL (Cumulative Index to Nursing and Allied Health Literature) and PILOTS (Published International Literature on Traumatic Stress). Text-word and thesaurus searches were carried out using a combination of search terms. Where applicable, search terms were shortened to allow for differences in American and English spellings, e.g. counselor/counsellor. Where possible, the searches were filtered to only include studies published in peer-reviewed journals, and only studies published in English or with English translations were included in the final analysis.

Studies published up until the end of August 2014 were considered for review. In addition to the electronic database search, a hand search of two relevant journals, *The Journal of Traumatic Stress* and *Traumatology* was carried out, which identified a further two studies that warranted examination.

Study selection

The initial search yielded a total of 477 studies, the titles and abstracts of which were screened to determine which were potentially eligible for inclusion. At this point, 439 studies were found to be duplicates or not relevant, leaving 38, the full texts of which were examined in detail.

Following this process, eight studies were removed as they did not meet inclusion criteria. Including the two studies found in the journal hand search, a total of 32 studies met all inclusion criteria (refer to Figure 1 for a breakdown of the study selection process). Of those that did not meet criteria, a number of them did use compassion fatigue measures (e.g. Professional Quality of Life Scale (ProQOL; Stamm, 2010), which also includes subscales of burnout and compassion satisfaction, but did not report any findings relating to compassion fatigue (e.g. Lambert & Lawson, 2013), two were not available in English and one used a measure of compassion fatigue to predict working alliance, rather than reporting correlates or predictors of compassion fatigue (Carmel & Friedlander, 2009).

Quality ratings

The quality of each study was assessed using the Quality Assurance Checklist (Kmet, Lee & Cook, 2004). The checklist comprises 14 items (see Table 1). Three items were not used in the present review as they are relevant only to studies that used an intervention. Each study was rated against the items on the checklist and achieved an overall score between 0 and 42 which is then converted to give a percentage score. Details of quality ratings can be found in Table 2.

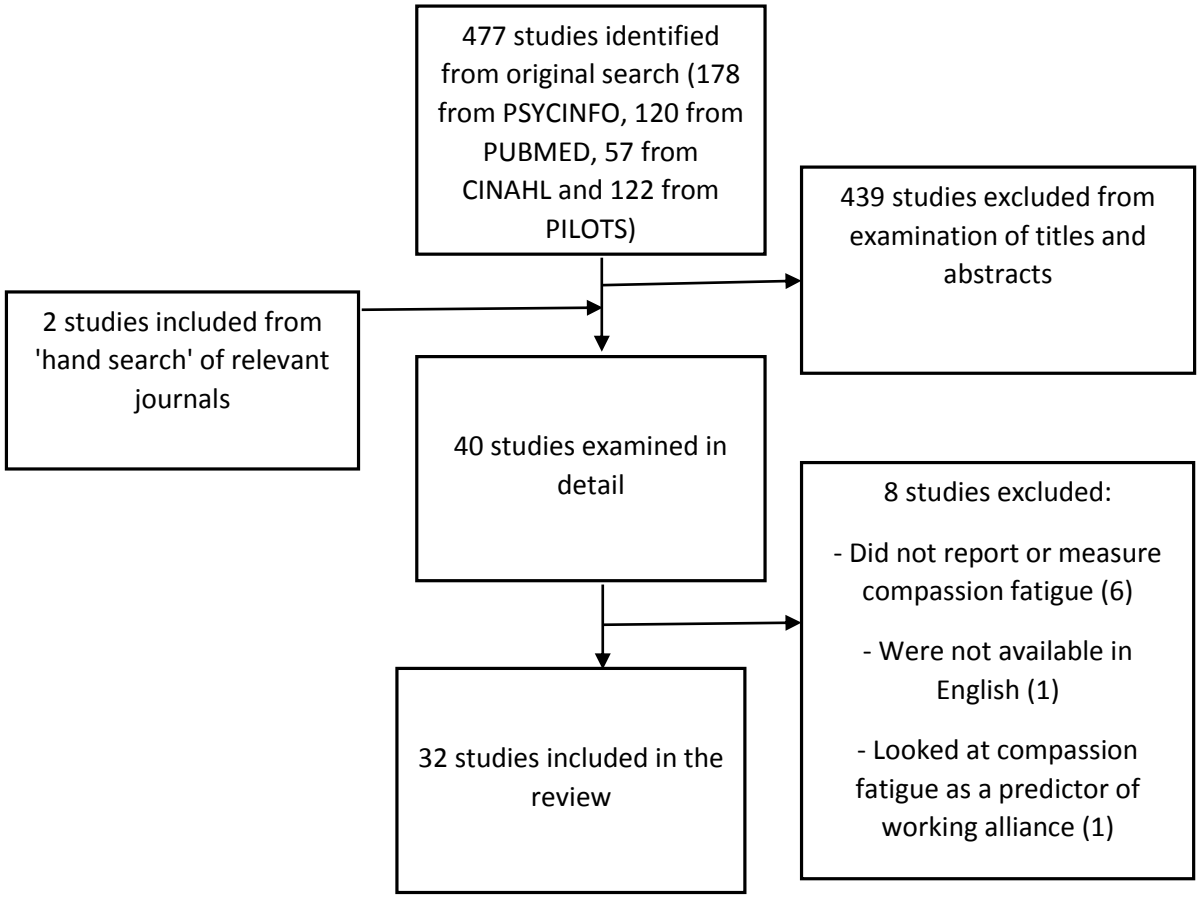

Figure 1. Study selection flowchart

Results

Design and demographic information

Thirty-two studies were included in the review, all of which were cross-sectional in design. While 23 studies used the ProQOL to measure compassion fatigue, different versions of the measure were used, including the 3rd, 4th and 5th editions (Stamm, 2010). Nine studies used the CFST which, similarly to the ProQOL, includes subscale measures of compassion fatigue, compassion satisfaction and burnout. In terms of location, most (18) studies were conducted in the USA, with three from Israel, two each from Germany and Canada, and one study each from

Table 1. Quality Assurance Checklist items (Kmet et al., 2004)

Item number	Item description
1	Question/objective sufficiently described?
2	Study design evident and appropriate?
3	Method of subject/comparison group selection or source of information/input variables described and appropriate?
4	Subject (and comparison group, if applicable) characteristics sufficiently described?
5	If interventional and random allocation was possible, was it described?
6	If interventional and blinding of investigators was possible, was it reported?
7	If interventional and blinding of subjects was possible, was it reported?
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?
9	Sample size appropriate?
10	Analytic methods described/justified and appropriate?
11	Some estimate of variance is reported for the main results?
12	Controlled for confounding?
13	Results reported in sufficient detail?
14	Conclusions supported by the results?

Note: Yes = 2, Partial = 1, No = 0

Lithuania, UK, Austria, Australia, Switzerland, Norway, South Africa and Italy (some studies used participants from more than one country).

Most studies used correlation and regression analyses to test relationships between compassion fatigue and other variables. Group differences analyses such

as t-tests and ANOVAs were also used, as was a Chi-square analysis in one study to investigate risk of compassion fatigue. Sample sizes ranged from 13 to 1,121, with a median of 135. While there were no constraints in terms of publication date within the selection criteria, all studies were published in 2002 or later.

While the focus of the present review was on mental health professionals, there was some variation in the specific job roles of participants. Sample populations included psychologists, trauma therapists, psychiatrists, telephone counsellors, genetic counsellors, child welfare workers, mental health social workers, employee assistance professionals, community mental health clinicians, forensic mental health nurses, psychotherapists, family therapists, and volunteer bereavement counsellors. See Table 2 for an overview of study characteristics and findings.

Overview of study quality

Each study was assessed using the Quality Assurance Checklist (Kmet et al., 2004), compared against the criteria in the checklist and given an overall quality rating. The studies varied widely in terms of sample size. Also, the way in which samples were recruited may have been open to bias. For example, many studies sent invitations to participants at random, often on a large scale, and relied on data being voluntarily returned. It is possible that participants who were experiencing higher levels of compassion fatigue may not have been as likely to take extra time to complete a battery of measures if they were already having some difficulties coping with the demands of their work.

Table 2. Overview of study characteristics, findings and quality ratings

Study	Sample	Country	N	CF Measure	Quality (%)	Main findings
Aukstinaityte et al. (2010)	Psychologists	Lithuania	103	ProQOL	85	CF was negatively correlated with self-care, the ability to leave working strain behind, hearing the signals of one's own body, preservation of healthy work limits, not allowing others to exhaust you, and setting and reaching life goals.
Birck (2002)	Professionals working with torture survivors	Germany	25	CFST	68	CF was positively correlated with disruptions of other safety, self-trust and self-esteem. Therapists showed higher CF than interpreters. There was no association between CF and supervision hours.
Boscarino et al. (2004)	Social workers	USA	236	CFST	70	CF was positively predicted by the level of World Trade Centre counselling involvement and negatively by a supportive work environment.
Buchanan et al. (2006)	Mental health trauma professionals	Canada	280	CFST	60	CF was positively correlated with perceived signs of STS.
Cohen et al. (2006)	Hospital social workers	Israel	53	CFST	68	CF was not significantly correlated with the number of terror incidents attended, nor with any of the demographic variables. No differences in CF were found between participants who received supervision and debriefing and those who did not.
Collins & Long (2003)	Trauma recovery workers	UK	13	CFST	70	Levels of CF increased over the first year in post.

Note: CF = Compassion fatigue, STS = Secondary Traumatic Stress

Table 2 continued

Study	Sample	Country	N	CF Measure	Quality (%)	Main findings
Connally (2012)	Community mental health clinicians	USA	36	ProQOL	80	There were no statistically significant differences among variables such as age, sex, ethnicity, and sexual orientation with CF.
Craig & Sprang (2010)	Trauma therapists	USA	532	ProQOL	90	CF was higher in therapists in inpatient care settings than community mental health centres and significantly more than those in private practice. CF was positively predicted by the percentage of PTSD cases on caseloads and negatively predicted by the use of evidence-based practice.
Deighton et al. (2007)	Psychotherapists treating torture survivors	Germany, Austria and Switzerland	100	ProQOL	73	CF positively correlated with number of clients seen per week. A combination of high advocacy and low degree of working through traumatic events was related to higher levels of CF.
Hatcher & Noakes (2010)	Clinicians treating sex offenders	Australia	48	ProQOL	85	CF was positively correlated with and predicted by role problems.
Injeyan et al. (2011)	Genetic counsellors	Canada	355	ProQOL	85	Counsellors were more at risk of CF if they had low dispositional optimism, and external locus of control. Using religion/spirituality as a coping mechanism positively predicted CF.
Jacobson (2012)	Employee Assistance Professionals	USA	325	ProQOL	85	CF was positively predicted by negative coping style.
Killian (2008)	Trauma therapists	USA	104	ProQOL	75	CF was positively predicted by work drain, sense of powerlessness regarding social welfare or judicial systems that are failing their clients, lack of emotional self-awareness, and therapists' history of trauma.

Table 2 continued

Study	Sample	Country	N	CF Measure	Quality (%)	Main findings
Lauvrud et al. (2009)	Forensic mental health nurses	Norway	70	ProQOL	77	No association was found between CF and prevalence of PTSD symptoms.
Lawson & Myers (2011)	Counsellors	USA	506	ProQOL	90	CF was negatively correlated with total wellness scores.
MacRitchie & Leibowitz (2010)	Trauma workers (counsellors)	South Africa	64	CFST	75	CF was negatively correlated with social support, and positively correlated with empathy. CF was not correlated with level of exposure to violent crime. Empathy moderated the relationship between CF and previous trauma. Participants who had previously been victims of crime and had higher empathy scores, scored more highly on CF.
Nelson-Gardell & Harris (2003)	Child Welfare Workers	USA	166	CFST	77	CF significantly correlated with all five scales of the Childhood Trauma Questionnaire, which were also significant predictors.
Newmeyer et al. (2014)	Mental health trauma workers	USA	22	ProQOL	82	CF was not associated with spirituality, ego resilience or stress vulnerability.
O'Sullivan & Whelan (2011)	Telephone counsellors	Australia	64	ProQOL	90	CF was positively correlated with posttraumatic growth, relating to others and personal strength.
Racanelli (2005)	Mental health clinicians	Israel and USA	66	ProQOL	86	CF was not significantly correlated with or predicted by attachment style, country of practice, years experience, experience of terrorism, hours worked per week, family experience of terrorism, or gender

Table 2 continued

Study	Sample	Country	N	CF Measure	Quality (%)	Main findings
Ray et al. (2013)	MH clinicians	Canada	169	ProQOL	90	CF was associated with CF was associated with several areas of work life quality and all three subscales of burnout.
Robins et al. (2009)	Medical, nursing, social work and allied health professionals	USA	314	CFST	73	CF was positively predicted by years in direct care, internal coping and three empathy subscales (perspective taking, fantasy and personal distress). Trauma workers were more likely to report high CF than those working in a children's hospital.
Rossi et al. (2012)	Community mental health workers	Italy	260	ProQOL	85	CF was positively correlated with negative life events, lifetime traumatic events and distress. CF was positively predicted by being female, having a professional qualification, having a fixed-term contract, being employed full-time, suffering a negative life event in the past 12 months and years working in the service.
Simon et al. (2005)	Oncology social workers	USA	21	CFST	80	CF was not significantly associated with age, length of time in oncology, number of clients seen each month, emotional involvement with clients, ability to separate work from home and level of social work licensure.
Sprang et al. (2007)	Behavioural health providers	USA	1,121	ProQOL	75	CF was associated with being female, being a medical provider (i.e. psychiatrist), and a lack of specialist training. CF was predicted by being female, young in age, having a higher educational degree, having less clinical experience, and a higher percentage of clients with PTSD.
Sprang et al. (2011)	Mental health workers	USA	668	ProQOL	70	Males reported significantly higher levels of CF than females. Hispanic workers, those in rural areas and those who had no religious activity also reported higher CF. Child welfare workers reported higher CF.

Table 2 continued

Study	Sample	Country	N	CF Measure	Quality (%)	Main findings
Thieleman & Cacciatore (2014)	Bereavement counsellors	USA	41	ProQOL	80	CF was negatively correlated mindfulness attention awareness. No significant relationship was found between the bereavement status of the participant and CF.
Thompson et al. (2014)	Mental health counsellors	USA	213	ProQOL	80	CF was negatively correlated with and was predicted by counsellor perceptions of positive working conditions and mindfulness. Females reported higher CF than males. CF was positively predicted by maladaptive coping styles.
Thomas & Otis (2010)	Clinical social workers	USA	171	ProQOL	95	CF was positively correlated with fantasy and personal distress subscales of empathy, and adult trauma history (also a predictor). CF was negatively correlated with emotional separation (also a predictor) and mindfulness.
Tosone et al. (2010)	New York social workers following 9/11	USA	481	ProQOL	85	CF was predicted by avoidant and ambivalent attachment styles, and the amount of time spent working with trauma victims.
Udipi et al. (2008)	Genetic counsellors	USA	222	ProQOL	95	CF was positively predicted by use of self-criticism and giving up as coping strategies, the number of different types of distressing events experienced, number of patients seen per week, religion, parental status and seeking support.
Zeidner et al. (2013)	Mental health professionals	Israel	89	ProQOL	80	Females reported higher levels of CF than males. CF was negatively correlated with trait emotional intelligence, emotion management and negative affect. Problem-focused coping was negatively correlated with CF.

Alternatively, those who had higher levels of compassion fatigue may have been more willing to participate, driven by a need to increase awareness of the issue. Either way, few studies discussed the impact of their recruitment strategies and the potential for bias in this way. Nevertheless, each study scored at least reasonably highly for quality; ratings ranging from 60 to 95, with a median of 80.

The studies were cross-sectional in nature and rarely did group comparisons. It is therefore possible that factors other than those being measured were influencing the amount of compassion fatigue being reported by participants. While some studies do acknowledge the limitations of cross-sectional designs, few studies discuss the possibility of extraneous variables influencing compassion fatigue. Yet it is possible that factors specific to that time were effecting levels of compassion fatigue, such as team dynamics, organisational support or wider social or political influences on health services.

Variables associated with or predicting compassion fatigue

Some variables were reported in a number of studies and are reviewed below. However, a large number of variables were reported in just one of the 32 studies reviewed. The number of variables reported in just one study is too great for every one to be described in detail. Therefore, only those that have the strongest and most significant findings are reported below (see Table 3 for a full overview of variables and statistics).

Gender

Of the 32 studies reviewed, 12 reported data on the relationship between gender and compassion fatigue. Of these, eight reported non-significant findings.

With reference to the quality of these eight studies, there is nothing to suggest that significant results were missed because of poor study design. Most of these studies did not report statistics for non-significant findings so it is difficult to determine any non-significant trends.

Two studies found that female gender was associated with higher levels of compassion fatigue (Thomson et al., 2014; Zeidner et al. 2013). In terms of group differences, one study found that females reported higher compassion fatigue than males (Sprang et al., 2007), whereas another found that males reported higher compassion fatigue than females (Sprang et al., 2011). These authors found that the main predictor of compassion fatigue in their sample was job role, namely child welfare workers. They attributed the anomaly regarding male gender to the fact that in their population most males were also child welfare workers.

Age

In terms of age, eight studies reported statistics relating to compassion fatigue. Only one reported a significant finding, with younger participants having higher levels of compassion fatigue (Sprang et al., 2011). However, the authors offer no discussion of why age might be significant in this population. In those that reported non-significant findings, three found very small trends towards compassion fatigue decreasing with age (Cohen et al., 2006; Nelson-Gardell & Harris, 2003; Thomas & Otis, 2010). Two studies reported mean compassion fatigue scores, with participants in the youngest categories (20-24 and 18-30) reporting lower compassion fatigue scores than the oldest (45+ and 50+; Hatcher & Noakes, 2010; Rossi et al., 2012), so the overall picture is very mixed.

Table 3. Statistical data relating to key variables by study

Study	Gender	Age	Experience	Trauma history	Empathy	Mindfulness	Burnout	CS	Other variables related to CF
Aukstinaityte et al. (2010)							r = .725 p < .001		Self-care (r = – .195, p = .048)
Birck (2002)	NS	NS	r = .40 p = .05				r = .78 p < .001	NS	Therapists had greater CF than interpreters (t = 2.45, p = .025); other safety (r = .51, p = .007); self-trust (r = .43, p = .027); self-esteem (r = .42, p = .029)
Boscarino et al. (2004)									World Trade Centre counselling involvement (β = .233, p < .001); Supportive work environment (β = −.196, p < .01)
Buchanan et al. (2006)									Current secondary trauma (r = .53, p < .01; β = .41, p < .01); Affected by client images (r = .48, p < .01; β = .33, p < .01)
Cohen et al. (2006)		NS	NS						Supervision, group supervision, debriefing = NS
Collins & Long (2003)							r = .78 p < .01	r = - .58 p < .05	
Connally (2012)	NS								Ethnicity, sexual orientation = NS
Craig & Sprang (2010)	NS	NS	NS						% clients with PTSD on caseload (β = .15, p < .001); Use of evidence based practice (β = - .09, p < .05)
Deighton et al. (2007)	NS		NS	t = 3.60 p < .001					Clients seen per week (r = .407, p < .05); Discrepancy between advocacy and practice of 'working through' traumas with clients (r = .35, p < .0001)

Note: NS = Non-significant, CS = Compassion satisfaction

Table 3 continued

Study	Gender	Age	Experience	Trauma history	Empathy	Mindfulness	Burnout	CS	Other variables related to CF
Hatcher & Noakes (2010)	NS	NS							Role problems (r = .32, p = .03; β = .32, p < .05); ethnicity, job role, role location, frequency of supervision, type of therapy delivered = NS
Killian (2008)				β = .23 p < .05					Work drain (β = .32, p < .05); Sense of powerlessness (β = .32, p < .05); Emotional self-awareness (β = −.24, p < .05)
Lauvrud et al. (2009)									
Lawson & Myers (2011)									Total wellness (r = - .37, p < .001)
MacRitchie & Leibowitz (2010)				t (62) = 3.97 p < 0.05	r = .41 p < .05				Social support (r = - .28, p < .05); Caseload = NS
Nelson-Gardell & Harris (2003)		NS	NS	Emotional abuse r = .356 p < .01 Physical r = .314 p < .01					

Table 3 continued

Study	Gender	Age	Experience	Trauma history	Empathy	Mindfulness	Burnout	CS	Other variables related to CF
Nelson-Gardell & Harris (2003) continued				Sexual r = .297 p < .01 Emotional neglect r = .331 p < .01 Physical neglect r = .260 p < .01					
Newmeyer et al. (2014)									
O'Sullivan & Whelan (2011)					NS				Posttraumatic growth (r = .26, p < 0.05); Relating to others (r = .26, p < .05); Personal strength (r = .25, p < .05); Crisis support (r = - .16, p > .05); Crisis support, shift call load, new possibilities, spiritual change, appreciation of life = NS
Racanelli (2005)									Country of work, avoidance = NS
Ray et al. (2013)							Emotional exhaustion r = .59 p < .01		Areas of work life (r = - .34, p < .01); workload (r = -.45, p < .01); control (r = - .19, p < .05); reward (r = - .28, p < .01); community (r = - .25, p < .01); fairness (r = - .26, p < .01)

Table 3 continued

Study	Gender	Age	Experience	Trauma history	Empathy	Mindfulness	Burnout	CS	Other variables related to CF
Ray et al. (2013) continued							Cynicism r = .39 p < .01 Efficacy r = - .21 p < .01		
Robins et al. (2009)	NS		β = .14 p < .001		Fantasy r =.19 p < .01 β =.16 p<.001 Personal distress r = .3 p < .01 β = .30 p < .0001 Persp taking β = - .15 p < .01		r = .68 p < .01	r = - .34 p < .01	Long-term employment (t = .31, p < .01)

Table 3 continued

Study	Gender	Age	Experience	Trauma history	Empathy	Mindfulness	Burnout	CS	Other variables related to CF
Rossi et al. (2012)	NS	NS	NS	F = 3.51 p = .03			r = .48 p < .001	r = - .16 p = .009	Negative life events (F = 5.68, p < .01) Distress (t = 6.66, p < .0001, r = .45, p < .001); Occupational status, marital status, living situation, educational level, graduate studies type of contract, job type, previous health service work, = NS
Simon et al. (2005)					NS		r = .46 p < .05	r = - .44 p < .05	Emotional involvement, ability to separate work from home, talking about death, social work licensure = NS
Sprang et al. (2007)	F(3, 1054) = 7.10 p <.01								Degree type (F(9, 771) = 2.56, p < .01); licensure (F(21, 1569) = 3.09, P < .001); organisation (F(15, 1548) = 1.90, p < .05); specialized training (F(3, 1074) = 12.82, p < .001)
Sprang et al. (2011)	t = 4.72 p < .005 β = .18 p < .001	r = - .3 p < .001 β = - .3 p < .001							Living in a rural setting (β = .14, p < .001); frequency of religious participation (sporadic β = - .21; active β = - .20; very active β = - .22); being a Child Welfare Worker (β = .36, p < .001)
Thieleman & Cacciatore (2014)						r = –.39, p=.01			Bereavement status = NS

Table 3 continued

Study	Gender	Age	Experience	Trauma history	Empathy	Mindfulness	Burnout	CS	Other variables related to CF
Thompson et al. (2014)	r = .22 p < .001		r = - .186 p < .001			r = - .448 p< .001 β = - .299 p < .001	r = .499, p < .001	r = - .205 p < .001	Perception of positive working conditions (r = -.361, p < .001; β = - .196, p < .05) Maladaptive coping (r = .411, p < .001; β = - .217, p = .003)
Thomas & Otis (2010)	NS	NS	NS	r = .229 , p < .05 β = .152, p < 0.05)	Fantasy r = .211 p < .05 β = .004 p > .05)	r = - .429 p < .001 β = - .079 p > .05	r = .646 p < .001	r = - .368 p < .001	Emotional separation (r = .611 , p < .001; β = - .499, p < 0.001); perspective taking, empathic concern = NS
Tosone et al. (2010)									Avoidance (β = .179, p < .001); ambivalence (β = .093, p < .01); time spent working with trauma victims (β = .167, p < .01)
Udipi et al. (2008)			NS				β = .43 p < 001	NS	Self-criticism and giving up (β = .24, p < .01); patients seen per week (β = .14, p < .01); religion (β = .14, p < .01); parental status (β = .12, p < .05); seeking support (β = .11, p < .05)
Zeidner et al. (2013)	F (7, 171) = 2.11 p < .05						r = .89 p < .01		Emotional intelligence (r = .28, p < .01; β = - .19, p < .01); emotion management (β = - .17, p < .01); negative affect (r = .37, p < .01; β = - .43, p < .01); emotion focused coping (r = .49, p < .01; β = .56, p < .01); avoidance (r = .30, p < .01); problem-focused coping (β = .17, p < .01); professional group (F(7,171) = 4.90, p < .001)

Level of experience

Ten studies examined the relationship between amount of clinical experience and compassion fatigue. This was typically measured by asking participants how long they had worked in the mental health field (e.g. Thompson et al., 2014), although in some studies participants were asked about how long they had worked in direct care (Robins et al., 2009), or for how long they had worked in that particular role (e.g. Rossi et al., 2014). Of these ten studies, only three reported significant findings. Compassion fatigue increased with years spent working in the field of trauma counselling (Birck, 2002), with a strong correlation reported, although this particular study had a very small sample size (N = 25). Participants who had worked for longer as a mental health practitioner in a children's hospital, were also more likely to report high compassion fatigue (Robins et al., 2009). However, one study found that as years spent in the mental health field increased, compassion fatigue decreased (Thompson et al., 2014), although the strength of the correlation here was small.

In terms of non-significant trends, three studies did report that compassion fatigue decreased as level of experience increased, although as might be expected the correlations here were small (Nelson-Gardell & Harris, 2003; Thomas & Otis, 2010; Udipi et al., 2008). These mixed results are perhaps to be expected given that a similar variation was found in the association between compassion fatigue and age.

Trauma history

The strongest predictor of compassion fatigue was participants' own experiences of traumatic life events, with six studies reporting that higher compassion fatigue was related to previous trauma. Some studies compared groups of participants based on whether they had or had not experienced some traumatic life event(s) and found that those who had experienced such events were more likely to report high compassion fatigue (Deighton et al., 2007; Rossi et al., 2012). One study reported higher compassion fatigue in participants who had previously been exposed to violent crime (MacRitchie & Leibowitz, 2010). Three studies found that compassion fatigue was higher in those with some trauma history (Thomson & Otis, 2010; Killian, 2008; Nelson-Gardell & Harris, 2003). Nelson-Gardell & Harris (2003) used a standard measure to assess past trauma (Childhood Trauma Questionnaire - CTQ; Bernstein & Fink, 1998) according to five subscales of childhood trauma: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. All CTQ subscales were associated with higher compassion fatigue. An additional study found that a measure of stressful life experiences was not related to compassion fatigue (Jacobson, 2012).

Empathy

Five studies reported findings related to empathy and compassion fatigue, with three reporting significant results. MacRitchie & Leibowitz (2010) found not only that participants' level of compassion fatigue increased as level of empathy increased, but that empathy also moderated the relationship between compassion fatigue and previous trauma. In other words, for those trauma workers who had previously been victims of violent crime, the higher their level of empathy, the

higher their compassion fatigue scores. While this is an interesting finding, this study scored below the median score for study quality, mainly due to a lack estimates of variance in its results statistics, and due to having a relatively small sample size (N = 64).

Two further studies used the subscales of the Interpersonal Reactivity Index (Davis, 1980) measure of empathy to look more closely at the relationship between empathy and compassion fatigue (Robins et al., 2009; Thomson & Otis, 2010). Scores for compassion fatigue were higher as scores on three empathy subscales increased: Fantasy (the tendency to transpose oneself imaginatively into the feelings and actions of fictitious characters), Perspective Taking (the tendency to spontaneously adopt the psychological point of view of others) and Personal Distress ("self-oriented" feelings of personal anxiety in tense interpersonal settings). However, in both studies the statistics suggested that Personal Distress was most strongly related to compassion fatigue, compared to the other two subscales. The Thomas & Otis (2010) study reported the slightly stronger correlation here and was methodologically the stronger of the two studies. This finding might suggest that it is the tendency to feel distress in response to that of others that is important to the development of compassion fatigue, as opposed to other facets of empathy such as the tendency to adopt the point of view of another spontaneously.

While Simon et al. (2005) found a non-significant result, the correlation coefficient was relatively large (- .40) and suggested that as empathy increased, compassion fatigue decreased. While this trend contradicts those above, it should be treated with caution, not just because it is not statistically significant but

because the empathy measure was not standardised (participants were asked to rate themselves on the single item: “empathetic response to clients”).

Mindfulness

Three studies assessed the link between mindfulness and compassion fatigue, and all found that greater levels of dispositional mindfulness were associated with lower levels of compassion fatigue. Two studies (Thieleman & Cacciatore, 2014; Thompson et al., 2014) used the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003) while the third (Thomson & Otis, 2010) used the Five-Facet Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer & Toney, 2006), both of which measure dispositional mindfulness and mindfulness attitudes. It was noticeable that the relationships reported in each of these studies were relatively strong, suggesting that mindfulness might play an important protective role against compassion fatigue.

Coping style

Four studies used formal measures of coping style and assessed its association with compassion fatigue. Three used the Brief COPE measure (Carver, 1997) which breaks down coping style into three subscales: problem-focused, emotion-focused, and maladaptive coping (Meyer, 2001). Two studies found that the use of maladaptive coping styles was associated with higher levels of compassion fatigue (Jacobson, 2012; Thompson et al., 2014). One study, which scored highly on the quality rating, found that two of the Brief COPE items in particular, use of self-criticism and giving up, were related to higher compassion fatigue (Udipi et al., 2008). The Coping Inventory for Stressful Situations - Situation

Specific Coping (CISS-SSC; Endler & Parker, 1990) was used in one study which found that task-focused coping was weakly associated with lower levels of compassion fatigue, while emotion-focused coping more strongly predicted high compassion fatigue (Zeidner et al., 2013). Some studies included variables that might be interpreted as coping methods but were not measured by formal questionnaires as above, such as social support, which was found to be related to lower compassion fatigue (MacRitchie & Leibowitz, 2010) and use of religion, which is discussed below.

Religion

Participant religion and religious practices were investigated in three studies with mixed findings in relation to compassion fatigue. One study found that participants who took no part in religious activities were more likely to report compassion fatigue compared to those who had sporadic, active or very active religious participation (Sprang et al., 2011). However, two studies found that the use of religion as a coping strategy predicted higher levels of compassion fatigue (Injeyan et al., 2011; Udipi et al., 2008).

Caseload

Four studies reported on the relationship between caseload and compassion fatigue. While one study found no significant relationship (MacRitchie & Liebowitz, 2010), the number of patients seen per week by genetic counsellors did predict higher compassion fatigue in one study (Udipi et al., 2008). In professionals working with trauma victims, a high number of cases seen per week was related to higher

compassion fatigue (Deighton et al., 2007) as was time spent working with victims (Tosone et al., 2010).

Other variables

Having a positive perception of one's work environment was associated with lower compassion fatigue (Thompson et al., 2014). High emotional intelligence, as measured by the Schutte Self-Report Inventory (SSRI; Schutte, Malouf, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998) predicted higher compassion fatigue (Zeidner et al., 2013), as did emotional separation (Thomas & Otis, 2010), measured by the Maintenance of Emotional Separation Scale (MES; Corcoran, 1982). The ability to identify one's own emotional states (as measured by emotional self-awareness – Emotional Self-Awareness Questionnaire; Killian, 2007) however was related to lower compassion fatigue (Killian, 2008).

Other ProQOL variables

Burnout

Ten studies reported on the relationship between compassion fatigue and burnout. All studies found significant positive correlations between the two variables, and these relationships tended to be strong. While a commonly used measure of burnout is the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981), most studies in this review used the ProQOL to measure burnout.

Compassion satisfaction

In addition, eight studies investigated the relationship between compassion fatigue and compassion satisfaction. Of these studies, six found that higher levels of

compassion satisfaction were quite strongly associated with lower levels of compassion fatigue, while the remaining two found non-significant results. As with burnout, compassion satisfaction was measured using either the ProQOL or CFST.

Discussion

The current review aimed to determine factors most commonly associated with compassion fatigue in mental health professionals. In total, 32 studies were reviewed, with a large number and variety of variables being investigated. The most commonly researched variables were grouped into 11 categories: gender, age, level of experience, trauma history, empathy, mindfulness, coping style, religion, caseload, burnout and compassion satisfaction. A number of further variables were also investigated that were not included within the categories as they were only reported in a single instance.

There was variation in the findings relating to some variables, with some studies' findings contradicting others. Furthermore, in some cases, the majority of studies reporting results for some variables found non-significant results. For example, regarding gender, from 12 studies reviewed, eight found a non-significant relationship with compassion fatigue. In many studies, non-significant statistics were not reported so it was difficult to determine non-significant trends.

The strongest predictor of compassion fatigue was the participants' own trauma history. Six studies reported that high levels of compassion fatigue were more likely in clinicians who had experienced traumatic events or had been exposed to violent crimes. The fact that a further study reported that number of stressful life experiences was not related to compassion fatigue suggests that there is something

specific about traumatic events that leave clinicians more vulnerable to compassion fatigue.

One thing that is not reported in these studies is whether or not clinicians had subsequent difficulties relating to their traumas or if they had received appropriate help to resolve any difficulties. It has been suggested that if previous exposure to trauma goes unacknowledged or unresolved it may intensify and increase symptoms of secondary trauma (Munroe et al., 1995; Solomon, 1993 – cited in MacRitchie & Leibowitz, 2010). Indeed, previous research that measured secondary trauma using a PTSD scale (Impact of Events Scale) has suggested that participants who considered their reactions to trauma to be unresolved, or who had had previous trauma therapy themselves, were more likely to have high secondary trauma (Creamer & Liddle, 2005; Hargrave, Scott & McDowall, 2006).

This has led some authors to suggest that the relationship between personal trauma history and reactions to working with traumatised others, has implications for the validity of secondary traumatic stress reactions (Elwood et al., 2011), such as compassion fatigue. If what is being conceptualised as a secondary trauma reaction can be explained by some pre-existing psychological difficulty, such as PTSD from a previous trauma, then individuals' reactions to trauma rather than their level of exposure may be more predictive of difficulties like compassion fatigue (Elwood et al., 2011).

It has also been suggested that organisations should make available services that provide helping professionals opportunities to process personal traumas (Killian, 2008). This is a potentially important finding when considering what might

motivate an individual to seek a career as a mental health clinician. It is possible that some clinicians may have had significant difficulties or trauma in their past and that this motivated them to help others in similar situations. However, they may be more prone to compassion fatigue as a result. Knowing that previous trauma history is related to higher compassion fatigue, clinicians or the organisations in which they work could be more pro-active in providing necessary support to protect against compassion fatigue.

As mentioned previously, empathy is proposed to play a key role in the development of compassion fatigue (Figley, 2002). Indeed, empathy was positively related to compassion fatigue in three studies, although two studies found no significant relationship. The relationship between empathy and compassion fatigue is not made clear by cross-sectional studies, however. Empathy's apparent role in the development of compassion fatigue suggests that those with higher empathy levels might be more vulnerable to compassion fatigue in the first instance. However, one of the effects of compassion fatigue is a reduction in an individual's ability to feel and display empathy (Mathieu, 2007). It is not necessarily clear therefore whether we would expect empathy to correlate positively or negatively with compassion fatigue. A clinician may have developed compassion fatigue because they are highly empathic for example, but have a low empathy score due to the effects of compassion fatigue. In order to investigate this relationship more thoroughly, longitudinal research is required.

Results from the current review however shed some further light on the relationship between empathy, compassion fatigue and trauma history. It has previously been suggested that professionals with a personal history of trauma may

be more vulnerable to secondary traumatic stress reactions because of the potential reactivation of traumatic memories and elicitation of intense empathic responses (Figley, 1995; McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995; cited in Bride, 2004). MacRitchie & Leibowitz's (2010) finding of empathy as a moderator between compassion fatigue and history of trauma in clinicians, does suggest that for those who had been previous victims of trauma (in this case violent crime), the higher their level of empathy, the higher they scored on compassion fatigue. It is therefore possible that empathy in and of itself does not necessarily increase a clinician's risk of compassion fatigue, but that it does so via its relationship with their previous experience of traumatic events, and how this plays out in their interactions with clients and patients.

One category of variables that had consistent results related to clinicians' coping styles. Coping style was measured using different tools. Zeidner et al. (2013) found that emotion focused coping (e.g. "blame myself for not knowing what to do") was related to high compassion fatigue, and task-focused coping (e.g. "determine a course of action and follow it''), was related to lower compassion fatigue. Generally, ways of coping that focused on self-criticism, avoidance of the problem or isolation were associated with higher compassion fatigue. The relationship with isolation perhaps relates to the finding that higher levels of social support were associated with lower compassion fatigue (MacRitchie & Leibowitz, 2010).

Measures of coping style tend to tell us about how an individual typically copes in stressful situations, rather than what specific strategies are useful in guarding against the stresses of the job. In this review however there is emerging

evidence for mindfulness being a useful protective factor for compassion fatigue. While only three studies measured mindfulness, they all found it to be related to lower levels of compassion fatigue. The two measures of mindfulness used in these studies: the Mindful Attention Awareness Scale and the Five-Facet Mindfulness Questionnaire, both measure dispositional mindfulness, such as the tendency to be receptive to what is happening around you. Neither measured whether or to what extent clinicians were actually practicing mindfulness as a coping strategy or lifestyle choice. Perhaps this would be a useful avenue for future research to further determine how useful mindfulness can be in building resilience against compassion fatigue.

Regarding clinicians' caseload, three out of four studies that investigated this found that compassion fatigue increased with the amount of cases seen or time spent working with clients. This makes intuitive sense in so far as one might expect clinicians to be more prone to compassion fatigue the more they are exposed to the challenges of working with clients. Another variable that is relevant to caseload is that of clinicians' level of experience. The results regarding this were mixed, with one study reporting a non-significant finding, two reporting that compassion fatigue increased with experience, and one other reporting the opposite.

It is possible that those with more experience are assigned the most challenging cases, or expected to cope with larger caseloads than those less experienced. At the same time it is possible that with their experience these clinicians have learned the most effective ways of coping and are then not as likely to be prone to compassion fatigue. One study in the review found that younger professionals were more likely to report compassion fatigue (Sprang et al., 2011)

and we can reasonably assume that they were therefore less experienced. Thompson et al. (2014) found that experience was associated with lower compassion fatigue. They suggested that those with more experience may be more likely to find themselves in supervisory roles and therefore less directly exposed to clients' trauma. But many clinicians in supervisory roles still continue to see clients and in addition are required to hold in mind the clients of their supervisees, as well as bear any distress that those clinicians may bring to supervision, so may in fact be more exposed.

The nature of the relationship between these variables is not clear, and it is likely that level of experience alone cannot explain the likelihood of developing compassion fatigue. Rather, the ways in which a clinician's role might change as they become more experienced might be more indicative of risk of compassion fatigue, as well as the myriad systemic factors that make up the work context and any significant personal challenges an individual might be facing at various points in their life.

Limitations

The studies included in this review were cross-sectional in design, and therefore unable to determine any causal relationships. This leaves many questions unanswered. For example, are clinicians more likely to develop signs of compassion fatigue because they employ 'maladaptive' coping strategies, or do the effects of compassion fatigue lead clinicians to change the way they cope with the demands of the work? Clinicians' own trauma history was a common predictor of compassion fatigue, but the nature of the studies does not allow us to understand what mechanisms might occur following a traumatic event that make the development of

compassion fatigue more likely. As mentioned above, the extent of the impact of these traumatic events and whether or not clinicians received or indeed required support following the events is not known.

The fact that the review only included quantitative findings also limited its scope. By definition, only those variables that researchers decided to measure could be analysed in relation to compassion fatigue, which in turn is limited by the availability of suitable measures. One way to broaden the scope of the review would be to include qualitative studies. Within the current review, four of the 32 studies included qualitative methods alongside quantitative (Collins & Long, 2003; Hatcher & Noakes, 2010; Killian, 2008; Udipi et al., 2008). The findings from these studies revealed further information about the use of coping strategies that clinicians described as being useful in preventing compassion fatigue. For example, using supervision as a space to debrief and share experiences of work was found to be helpful, or indeed "crucial" in dealing with the impact of working with clients (Hatcher & Noakes, 2010; Killian, 2008). Also, the study by Udipi and colleagues (2008) could potentially provide more insight into clinicians' empathy and the emotional impact of counselling. Participants here described the draining effect of being emotionally invested in clients, and the power of emotional countertransference in provoking reactions about their own personal situations.

Of all the variables measured alongside compassion fatigue, one of those most strongly related was burnout. It is likely that the conceptual overlap between the two constructs explains the high association. It is also possible that individuals begin to develop signs of compassion fatigue once they begin to feel burnt out, or

vice versa. In one study, compassion fatigue was related to all three subscales of the MBI, and particularly strongly with *emotional exhaustion* (Ray et al., 2013). Potentially useful further research might involve combining the research literature on predictors of both burnout and compassion fatigue to see whether they share common predictors.

While the present review chose specifically to focus on compassion fatigue as a stand-alone construct, there is a lack of clarity about how distinct it is from other concepts, particularly secondary traumatic stress. Compassion fatigue is different from secondary traumatic stress in that it is characterised by exhaustion and a reduction in empathy; affects that accumulate over time, whereas secondary traumatic stress is more an anxiety, PTSD-like reaction to hearing about traumatic events. Nevertheless the measures used to quantify compassion fatigue, for example the ProQOL, are subjectively similar to those used to measure secondary traumatic stress (e.g. Secondary Traumatic Stress Scale (STSS); Bride et al., 2004). Because the two terms are often used interchangeably, it is possible that the current review did not detect papers that used the ProQOL measure, for example if such studies did not specifically use the term compassion fatigue. Further research is required to clarify the conceptualisations and measurements of these constructs.

Implications

One of the most exciting implications from this review is the emergence of coping strategies that may be useful in protecting against compassion fatigue. For example, the relationship between mindfulness and compassion fatigue could have implications for the way in which clinicians manage the stresses of their work. The

findings in this review open the door for further, more experimental research that would develop our understanding, such as investigating the effectiveness of mindfulness over time as an intervention in the workplace, or testing differences between groups of clinicians who use mindfulness and those who do not. Indeed, recent research has suggested that meditation practices might be effective in reducing stress and promoting resilience (Seppala, Hutcherson, Nguyen, Doty, & Gross, 2014), although this was in an undergraduate student population. An older study found that an eight-week meditation-based stress reduction programme helped reduce anxiety and psychological distress in medical students, as well as increase overall empathy scores (Shapiro, Schwartz, & Bonner, 1998).

While most studies in the review measured and reported on a number of different variables, few conducted further analyses to look at how the different variables might interact in relation to compassion fatigue. One example to the contrary is that of MacRitchie & Leibowitz (2010) who found overall level of empathy moderated the relationship between compassion fatigue and previous trauma. It would be interesting to investigate relationships between variables that are most strongly or regularly associated with compassion fatigue. For example, it may be that clinicians with a history of trauma are more likely to engage in less effective coping strategies, or that the types of coping strategy used is somewhat dependent on a clinician's age or gender.

Some of the factors that were related to compassion fatigue in this review are not things that a clinician can control, such as age, gender, experience and trauma history, for example. Nevertheless, increasing awareness and knowledge of

common factors that are associated with compassion fatigue is a useful first step in encouraging clinicians to adopt strategies to help them cope with the emotional impact of working in the field of mental health.

Clearly, the factors influencing the development of compassion fatigue are numerous and the relationships between them complex. The aim of trying to understand the most common predictors of compassion fatigue is not to create a reliable 'profile' of individual characteristics to determine who is most likely to be affected. The present review has attempted to pull together a relatively large body of research into factors influencing the development of compassion fatigue. The field would clearly benefit from more experimental or longitudinal research, to more accurately determine what factors make the onset of compassion fatigue more likely. The findings from the review are not conclusive, but there is a lot of potential for further research that might examine more rigorously the findings reported here.

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Part two

Empirical paper

Empathy and compassion fatigue in specialist police officers working with victims of rape and sexual assault: Assessment and brief training intervention

Abstract

Aims: This study examined whether compassion fatigue, secondary traumatic stress and burnout in police officers who interview rape victims were associated with empathy and years of service. It also evaluated a brief training intervention which aimed to teach officers about these concepts and impart self-help strategies for managing stress.

Method: 142 specialist police officers attended the training intervention and completed measures of compassion fatigue, secondary traumatic stress, burnout, dispositional and situational empathy, and knowledge. Measures were completed immediately before the training and at 8-10 week follow-up.

Results: There were no associations between empathy and compassion fatigue or secondary traumatic stress. High dispositional empathy was associated with low burnout. Compassion fatigue, secondary traumatic stress and burnout increased the longer participants had been in their occupational role. Participants' knowledge and awareness of these concepts increased following the training.

Conclusions: The findings do not support the hypothesised association between empathy and compassion fatigue, within a police population. They do suggest a higher risk of compassion fatigue, secondary traumatic stress and burnout after more years in trauma-related job roles. Longitudinal research is required to further explore these relationships. Training interventions and more organisational support may be useful for helping police officers who work with sexual assault victims. Further research should test the effectiveness of such interventions and self-help strategies and how they might best be embedded within the systemic context.

Introduction

In the UK, low conviction rates for rape and sexual assault attract widespread public interest. In particular, concern was raised about the fall in conviction rates in 2013-14, given that rates had gradually been increasing in recent times. In 2014, it was common to see headlines such as "Why are rape conviction rates falling?" (Channel 4 news, 2014), or "Measures aimed at addressing drop in rape convictions launched" (Casciani, 2014). This sudden decrease led the Crown Prosecution Service (CPS) and police to develop the National Rape Action Plan (CPS, 2014). In their Violence against Women and Girls report, the CPS (2014) pledged their commitment to address issues that prevent rape cases from progressing through the criminal justice system successfully. Nevertheless, it is important to investigate why the conviction rate for rape remains low.

The reasons behind this low conviction rate are numerous and complex. Some research has suggested that attrition rates may be high because victims fear the criminal justice process and the possibility of not being believed (Office for Criminal Justice Reform, 2006), or the fact that the process can be lengthy, repetitious and badly portrayed by the media (Maddox, Lee & Barker, 2012).

A growing body of research suggests that victims' experiences of engaging with professional services, including police, could have a big impact on attrition rates in rape cases. For example, the amount of empathy that victims perceive in their investigating police officer has been associated with the likelihood of them deciding to continue with the prosecution process and go to court (Maddox, Lee & Barker, 2011). Patterson (2011) suggested that victims who were made to feel more comfortable with their interviewing officer were more likely to disclose more

information. Also, in cases that led to prosecution, victims were more likely to have felt that they were believed. Similar findings were seen in a recent study involving an adolescent population (Greeson, Campbell & Fehler-Cabral, 2015).

Factors affecting the way in which police officers interview victims

It is clear that the way in which police officers interact with victims is crucial, not just for gathering information for the case, but for the engagement of victims in the prosecution process which is vital for conviction rates. To date, research has focused largely on the experiences of victims in this process, rather than from a police perspective. The present study aims to investigate factors that might be influencing the way in which police officers interact with rape victims, with a particular focus on the challenges that officers face in light of the difficult and complex nature of this work.

Impact of exposure to traumatic material

Victims of rape and sexual assault are likely to develop signs of Post-Traumatic Stress Disorder (PTSD; Kilpatrick, Saunders, Veronen, Best & Von, 1987), shame and self-blame (Lee, Scragg & Turner, 2001) following an assault. Professionals who are either exposed to the traumatic material of others, or are involved in helping others in distress, are at risk of developing psychological difficulties themselves. Various terms have been used to describe the impact of this exposure, including *compassion fatigue* (Figley, 2002), *secondary traumatic stress* (Figley, 1995), and *burnout* (Maslach, 1982; see Elwood, Mott, Lohr & Galovski (2011) for a review).

Burnout has been described as psychological and emotional exhaustion, associated with feelings of hopelessness and difficulties in dealing with work or in doing your job effectively (Stamm, 2010). It is associated with a reduction in a sense of professional accomplishment (Maslach, 1982) and is not specific just to those working with victims of trauma.

Secondary traumatic stress was first used to describe the development of PTSD-like symptoms in individuals exposed to the trauma of another, either in a counselling role or as a caregiver (Figley, 1995). Similarly to PTSD, signs of secondary traumatic stress relate to arousal, avoidance and intrusive thoughts or memories. In order to develop secondary traumatic stress, an individual does not directly witness or experience a traumatic event, but becomes distressed by hearing about that of another. Secondary traumatic stress could in theory develop from just a single incident of exposure to traumatic material, rather than necessarily building up over time, as with burnout. Secondary traumatic stress could potentially affect any professional who might be involved in helping those who have experienced something traumatic (e.g. social workers; Bride, 2007).

The term compassion fatigue is often used interchangeably with secondary traumatic stress. Compassion fatigue was initially described by Figley as a type of secondary traumatic stress reaction that was essentially the same as secondary traumatic stress, but with a less stigmatising name (Figley, 1995). However, more recent writing on compassion fatigue has moved away from an emphasis on these PTSD-type symptoms. Instead, the defining characteristics of compassion fatigue have been related more to their impact, such as a reduction in the capacity or interest in bearing the suffering of others (Figley, 2002); physical and emotional

exhaustion and a pronounced reduction in the ability to feel empathy and compassion for others (Elwood et al., 2011; Evces, 2015; Mathieu, 2007).

Similarly to burnout and secondary traumatic stress, compassion fatigue is not limited to trauma therapists and has in fact been found to be prevalent in many different healthcare and helping professions (e.g. Cicognani, Pietrantoni, Palestini & Prati, 2009; Gleichgerrcht & Decety, 2014; Hegney, 2014; Simon, Pryce, Roff & Klemmack, 2005; Yan & Beder, 2013; Zeidner, Hadar, Matthews & Roberts, 2013). It is possible that compassion fatigue, secondary traumatic stress and burnout could affect police officers who interview rape victims, because rape victims are likely to be traumatised (Kilpatrick et al., 1987).

In contrast to the challenges described above, the term *compassion satisfaction* has been used to describe the positive aspects of working in helping professions. It has been suggested that professionals and carers can gain pleasure and satisfaction from helping and making a difference to the lives of others (Figley & Stamm, 1996, cited in Conrad & Kellar-Guenther, 2006).

Why are empathy and compassion important?

Empathy has long been established as playing an important role in psychological therapy, particularly in forming good therapeutic relationships (Rogers, 1957) and more recently has also been recognised across a range of other helping professions (e.g. López-Pérez, Ambrona, Gregory, Stocks & Oceja, 2013; May, 2013). Previous research suggests that police empathy can be important in the engagement of rape victims in legal prosecution and court processes (Maddox et al., 2011).

The ability to display compassion has also recently been the subject of national focus in the UK, with the serious incidents in mid-Staffordshire NHS Trust resulting in an investigation and report which highlighted how severe the consequences of a lack of compassionate care can be (Francis, 2013). The Government's response to the Francis report recommended that compassion is essential in providing effective healthcare (Department of Health, 2013).

Etiological model of compassion fatigue and empathy

Figley (1995) proposed that professionals who have a high capacity for feeling and expressing empathy are more at risk of compassion fatigue. The model suggests that empathy can lead individuals to experience the emotional distress of those they are helping, and this contributes directly to the development of compassion fatigue as a secondary traumatic stress response (Figley, 2002).

Figley's model therefore suggests that highly empathic individuals are more likely to develop compassion fatigue. At the same time, the literature suggests that one of the effects of compassion fatigue is a gradual reduction in empathy. This presents something of a conundrum, in that empathy is crucial for delivering effective care, yet at the same time leaves professionals more vulnerable to compassion fatigue and secondary traumatic stress.

It is important to acknowledge that Figley's model was developed within the context of psychotherapy, not police work. However, there are important similarities between the role of a trauma therapist and that of an investigating police officer that make it reasonable to extend the model in this way. For example, one of the primary goals of trauma-focused work is for the patient to describe the

details of their trauma as a form of exposure. While the purpose of their work is very different, the police will similarly be encouraging victims they interview to disclose as much detail as they can about an assault, and are as such similarly exposed to traumatic material.

Compassion fatigue, secondary traumatic stress and empathy

Compassion fatigue was chosen as a focus of this study because of its link with empathy (e.g. Evces, 2015; Figley, 1995, MacRitchie & Liebowitz, 2010; Mathieu, 2007, Robins, Meltzer & Zelikovsky, 2009). While it has been suggested that compassion fatigue leads to a reduction in empathy (e.g. Evces, 2015, Mathieu, 2007), there is no longitudinal research that supports this claim, although it would seem to make intuitive sense. Some qualitative research has however suggested that nurses can over time withdraw or distance themselves from patients as a protective factor from emotional exhaustion (Austin, Goble, Leier & Byrne, 2009).

It may be that different types of empathy are linked to compassion fatigue and secondary trauma and in different ways. One study has suggested that health professionals with high affective empathy (e.g. personal distress) had higher compassion fatigue, and that as compassion fatigue increased, cognitive empathy (e.g. perspective taking) reduced (Robins et al., 2009). However, other studies have failed to replicate these findings related to cognitive empathy (Thomas & Otis, 2010).

The relationship between empathy and compassion fatigue and secondary traumatic stress is not clear and requires further investigation. It is important to investigate any factors that might be affecting police officers' ability to feel and

display empathy, especially given the importance of empathy when interviewing rape victims (Maddox et al., 2011).

Building resistance to compassion fatigue

With the potential impact of compassion fatigue and secondary traumatic stress becoming increasingly well recognised, attempts have been made to establish what can be done to prevent them. Some have argued that increasing awareness and prevention of compassion fatigue and secondary traumatic stress is a matter of professional responsibility (Salston & Figley, 2003).

Interventions at both an organisational and individual level have been proposed (Sexton, 1999). Organisational measures include ensuring that resources such as counselling, peer support groups or supervision are available (Figley, 1995); assisting professionals to maintain realistic limits and boundaries; normalising reactions to traumatic material through open discussions; debriefing and having regular opportunities to speak safely about the impact of the work (Mathieu, 2007).

The development of individual strategies for managing compassion fatigue and secondary traumatic stress is a growing area of intervention, with many programmes and websites dedicated to this topic. Many of these are self-help strategies that focus on self-care; identifying and modifying cognitive changes resulting from trauma exposure; and achieving a balance between work and personal life (See Elwood et al., 2007; Flarity, Gentry & Mesnikoff, 2013; Gentry, 2002; Gentry & Baranowsky, in press; Mathieu, 2012; Pearlman & Saakvitne, 1995; Salston & Figley, 2003). There is some evidence in the healthcare field for the effectiveness of such interventions (Potter, Deshields, Berger, Clarke, Olsen & Chen,

2013). There is also emerging evidence for mindfulness being a protective factor against compassion fatigue (Thieleman & Cacciatore, 2014; Thomas & Otis, 2010; Thompson, Amatea & Thompson, 2014).

Summary and aims

One way of examining Figley's (2002) model would be to test the idea that highly empathic individuals, i.e. those with high dispositional empathy, are more likely to develop compassion fatigue and secondary traumatic stress. In contrast, the literature also suggests that the amount of empathy actually felt by an individual towards those they are helping, i.e. situational empathy, may reduce as an effect of compassion fatigue and secondary traumatic stress. This suggests a longitudinal process whereby situational empathy reduces over time. It would be useful to test situational empathy in a police population, given how important their interactions with rape victims are.

The idea of high dispositional empathy being associated with lower situational empathy seems counter-intuitive. However, the present study aimed to investigate these associations based on the assumption that an individual's dispositional empathy can remain relatively stable over time, but that their situational empathy felt towards others can fluctuate.

Therefore, the present study used a cross-sectional design to investigate whether police officers with high dispositional empathy were more likely to be experiencing compassion fatigue and secondary traumatic stress. It also investigated whether police officers with higher levels of compassion fatigue and

secondary traumatic stress were less likely to actually feel situational empathy towards victims.

In addition, the present study reports on the effectiveness of a brief exploratory training intervention aimed at increasing police officers' knowledge and awareness of compassion fatigue and secondary traumatic stress, as well as introducing them to self-help strategies such as those described above. Officers' knowledge of these different concepts was assessed before and after the intervention using a pre and post design, as well as an 8-10 week follow-up. Compassion fatigue and secondary traumatic stress levels were also measured at follow-up to test the effects of the intervention. A further aim was to collect feedback about the training to see if it was useful and well received.

The following questions were investigated using a sample of police officers who specialise in interviewing and supporting rape victims:

1. Is there a correlation between police officers' dispositional empathy, and their levels of compassion fatigue and secondary traumatic stress? It was hypothesised that high dispositional empathy would be associated with higher levels of compassion fatigue and secondary traumatic stress.
2. Is there a correlation between the situational empathy that police officers feel towards victims, and their levels of compassion fatigue and secondary traumatic stress? It was hypothesised that those with higher levels of compassion fatigue and secondary traumatic stress would have lower situational empathy.

3. Does a training intervention about compassion fatigue, secondary traumatic stress and burnout increase police officers' awareness and knowledge of these concepts?
4. Does a training intervention that introduces self-help strategies have an impact on police officers' levels of compassion fatigue, secondary traumatic stress and burnout?
5. Do police officers welcome this type of training intervention and find it acceptable and useful?

Method

Joint project

This research was conducted as part of a joint project with Naomi Glover, Trainee Clinical Psychologist at University College London (see Appendix 1). While the current study focused on the role of compassion fatigue and secondary traumatic stress in police officers, Glover (2015) investigated levels of PTSD recognition and knowledge in the same participant group, as well as whether this knowledge could be improved via a training intervention. Appendix 1 summarises each researcher's contributions.

Design

A mixed-methods design was used. A cross-sectional design was used to investigate the first two research questions relating to compassion fatigue, secondary traumatic stress and empathy. For research questions three and four, a pre and post-test design was used. The research was conducted using a sample of

police officers working in the London Metropolitan Police Service, from September 2014 to January 2015, with follow-up data being collected up until May 2015.

Procedure

Prior to participants being recruited, permission to conduct research with the police was obtained via the Metropolitan Police Service's Corporate Development team. Discussions were held between the research team and the Training and Communications team of the Sexual Offences, Exploitation and Child Abuse (SOECA) Command. Following this, it was agreed that officers from the SOECA command would be invited to attend the training, and invited to take part in the research on the day of the training. Potential participants were identified from two strands. Firstly, all officers who are new to the SOECA command attend a week of mandatory training as part of their induction. The training was therefore incorporated into this induction week. Secondly, managers of 'satellite' SOECA teams in different London boroughs were invited to request the training to be delivered to their staff teams. SOECA is divided into two commands. One, referred to as SOECA-2 deals with adult victims, whereas SOECA-5 deals with child victims.

The training lasted for approximately 90 minutes and was delivered alongside the PTSD training (Glover, 2015). In total, the training was delivered in five different induction sessions between September 2014 and January 2015, in which 90 participants from both SOECA-2 and SOECA-5 attended. In addition, requests for training were received from three satellite teams. From this, five further training sessions were delivered between December 2014 and January

2015, in which an additional 52 participants from SOECA-2 attended, who had more experience working in the SOECA command.

At the beginning of the training intervention, attendees were informed about the research and the rationale behind it. They were invited to take part in the research and told that their attendance would not be dependent on them consenting to take part. Attendees were provided with a research information sheet (see Appendix 2) which allowed them to make an informed decision about participation. Those who wished to participate were asked to sign a consent form (see Appendix 3) and informed about confidentiality and anonymity procedures.

Once participants had consented to take part, they completed a set of questionnaires containing a demographics questionnaire, a knowledge questionnaire, the Professional Quality of Life Scale (ProQOL; Stamm, 2010), the Secondary Traumatic Stress Scale (STSS; Bride, Robinson, Yegidis, & Figley, 2004) and the Toronto Empathy Questionnaire (TEQ; Spreng, McKinnon, Mar, & Levine, 2009). Participants were then shown three video vignettes (see below) and asked to complete a vignette questionnaire in response. After the second training intervention, the Metropolitan Police requested that the video vignettes were not shown in the remaining induction sessions because they were deemed to be less relevant to those working with children, and they were shown in the satellite training sessions only. As a result, 77 participants viewed and rated the vignettes, while 65 did not.

Directly following the training, participants completed the measures again (except for the demographics questionnaire). Follow-up measures were sent to

participants who provided their email address on the demographics questionnaire, via the Smart Survey online tool. Follow-ups were sent eight to ten weeks following the training, with each group receiving three reminder requests to complete the questionnaires. All measures from the training day were sent as part of the follow-up, except for the demographics questionnaire. In addition, an extra item was added to the knowledge measure, asking participants whether they had made use of any of the self-help strategies described in the training.

Ethics

Ethical approval for this research was granted by the University College London Research Ethics Committee (see Appendix 4). As detailed above, all participants were issued with participant information sheets and asked to complete consent forms. All participants were given the opportunity to ask the researchers any questions they had about the research prior to and following recruitment. Participants were also offered a debrief following the training if they wished.

Video vignettes

Six video vignettes were devised and recorded, three of which were shown before the training, and three immediately following. The vignettes were designed to represent an individual describing the details of a rape, as if they were describing it to an investigating officer. In order to ensure an appropriate range of presentation styles, characters and accounts within the vignettes were based on the 'mad, bad and real' victim profiles as described in previous research (Maddox et al., 2012). Two vignettes for each profile were filmed and one of each was shown pre and post-training. The version of each vignette that was shown pre and post was

alternated between each training session. The vignette scripts and actors' directions were adapted to fit these three profiles. For example, the two 'real victim' vignettes contained lots of details about the offence, and appropriate emotion was displayed by the actor when describing the assault. In contrast, the 'bad victim' vignettes were presented as being unemotional and as having an ulterior motive for reporting the assault; and the 'mad victim' vignettes were presented as being vague in their account and quite emotionally unstable (see Appendix 5 for example scripts).

In order to ensure that the vignette scripts were as realistic as possible, a series of steps were taken. Firstly, online rape and sexual assault support forums were consulted, where victims had shared their experiences of being raped. The scripts were based on these accounts but with details altered in order to protect the identity of victims. Once initial scripts had been developed, they were sent to an independent clinical psychologist at University College London, who has experience working with rape and sexual assault cases in a PTSD clinic in London. The scripts were verified as being realistic and typical of the kind of case seen in the clinical practice.

For the filming of the vignettes, amateur actors were recruited and reimbursed £25 for their time. Pilot videos were filmed initially, which led to the standardisation of the final versions. For example, actors were matched for gender, hair colour and age, and were filmed wearing plain black clothing, in the same room against a plain white background.

Training content

The content of the training was divided into two parts. The first part consisted of psychological education about stress, compassion fatigue, secondary traumatic stress and burnout. The second part focused on self-help strategies that can be used to reduce or build resistance against compassion fatigue and stress more generally. The self-help section of the intervention was further broken down into six sections: 1. Identifying physiological signs of stress; 2. Self-care; 3. Anxiety and stress management, such as relaxation strategies; 4. Social support and debriefing; 5. Mindfulness; and 6. Compassion satisfaction (see Table 1 for training content and Appendix 6 for PowerPoint slides from the training).

The content of the training intervention was based on literature for building resistance to compassion fatigue and secondary traumatic stress. For example, a number of authors have advocated the use of self-care, identifying personal signs of stress and compassion fatigue, anxiety management strategies, social support, compassion satisfaction and mindfulness (Flarity, Gentry & Mesnikoff, 2013; Gentry, 2002; Gentry & Baranowsky, in press; Mathieu, 2012; Sexton, 1999; Thieleman & Cacciatore, 2014). As part of the training, participants were also provided with a resource pack which included worksheets relating to self-care, anxiety management strategies (for example, breathing exercises), mindfulness exercises, copies of the training material and a list of useful books and websites.

Feedback

Participants were asked to provide feedback about the training. This was collected in a survey that was included in the pack of post-training questionnaires.

Table 1. Training aims, content and activities

Training section	Aims	Content	Activities
1. Identifying physiological stress signals	- To help participants recognise what their 'stress signature' feels like. - To promote early recognition of stress signals in the body	- Information about the body's physiological stress response - 'Fight or flight' and what triggers this	- Activity using a 'shock ball' that emits small electric shocks at random intervals* - Participants noted what bodily stress signals they detected
2. Self-care	- To advocate the importance of self-care in protecting against the build-up of stress	- Use of 'stress bucket' analogy to illustrate the usefulness of protecting against rather than reacting to stress	- Encouraging participants to consider their own self-care activities - Directing to a stress bucket activity sheet in the resource pack
3. Anxiety and stress management	- To help participants change perspective of anxiety and focus on things that they can control, such as bodily stress responses, rather than having an external locus of control	- Information about the tendency to focus on and change the external environment to manage anxiety - Advice about the use of relaxation strategies	- Participants were directed to relaxation strategy information and activity sheets in the resource pack
4. Social support and debriefing	- To find out whether participants use formal or informal debriefing methods, discuss its utility and the practice of 'safer' debriefing	- Discussion of ways of coping with hearing traumatic material - Information about ways of debriefing with colleagues	- Three steps of 'safer debriefing' were outlined
5. Mindfulness	- To introduce participants to the basic concepts of mindfulness - To give the opportunity to practice mindfulness	- Principles of mindfulness - Discussion about its benefits in relation to stress and compassion fatigue	- Participants took part in a brief mindfulness exercise - Signposting to materials online and in the resource pack
6. Compassion satisfaction	- To introduce participants to the concept of compassion satisfaction - To consider how it can be applied to their roles	- Principles of compassion satisfaction in the context of working in the police	- Reflection exercise including six questions designed to promote compassion satisfaction
Closing exercise			- Participants were invited to write down on a card two self-care strategies they would implement in the coming week

Note: *(based on an exercise from .b mindfulness programme)

Participants rated the item: “I know more about compassion fatigue and how that may impact on my work” on a 1 (Strongly disagree) to 7 (Strongly agree) Likert scale. They were also asked to provide written responses on what elements of the training they found helpful and not helpful, how the training could be improved, and any other comments.

Power analysis

For the cross-sectional part of the study, power analysis undertaken using “G*Power” (Faul, Erdfelder, Lang & Buchner, 2007) software indicated that in order for a medium effect size of 0.3 to be detected, a sample of 82 participants would be required, based on a correlation analysis, assuming an alpha rate of 0.05 (two-tailed) and power of 0.80.).

For the pre and post-test design, a power analysis using the same software indicated that in order for a medium effect size of 0.5 to be detected, a sample of 34 participants would be required, based on a t-test of the difference between two dependent means (matched pairs), assuming an alpha rate of 0.05 (two-tailed) and power of 0.80.

Measures

The Professional Quality of Life Scale (ProQOL; Stamm, 2010. See Appendix 7). The ProQOL is a 30-item self-report scale consisting of three subscales measuring compassion fatigue, compassion satisfaction and burnout, and is widely used in the compassion fatigue literature. The measure asks participants to answer items in relation to the last 30 days. ProQOL items include *“I find it difficult to separate my personal life from my life as a [helper]”* (compassion fatigue), *“I feel "bogged down"*

by the system" (burnout) and *"I believe I can make a difference through my work"* (compassion satisfaction). Responses are given on a scale from 1 (Never) to 5 (Very often).

This measure has been shown to be reliable in previous studies on all three subscales (e.g. Connally, 2012). While good face validity and construct validity is claimed in the ProQOL manual (Stamm, 2010b), there are no validation studies of the current measure in peer-reviewed journals, although there are such studies for previous versions of the measure (e.g. Adams, Boscarino & Figley, 2006).

Mean ProQOL scores and standard deviations have been reported in previous studies in different populations, e.g. emergency nurses (Flarity, Gentry & Mesnikoff, 2013), residential care workers (Eastwood & Eckland, 2008), mental health clinicians (Connally, 2012) and therapists working with sexual offenders (Carmel & Friedlander, 2009). ProQOL subscale scores can be categorised using cut-off scores. Scores of 22 or less are considered to be low, 23-41 average, and 42 or more high. The measure was adapted slightly for the current population. For example, the original ProQOL item: "*I am preoccupied with more than one person [I help]"*, was changed to: "*I am preoccupied with more than one of the victims I have seen recently"*.

Despite some limitations of this measure (discussed further below), the ProQOL was taken to be a measure of compassion fatigue for the purposes of the present study.

The Secondary Traumatic Stress Scale (STSS; Bride et al., 2004; see Appendix 8). The STSS is a 17-item self-report scale designed to measure the emotional

effects of indirect exposure to trauma in a professional context, including subscales for intrusion, avoidance and arousal symptoms. Participants are asked to provide responses relating to the past seven days on items such as *"Reminders of my work with clients upsets me"* (Intrusion subscale), *"I wanted to avoid working with some clients*" (Avoidance subscale), and *"I had trouble concentrating"* (Arousal subscale). Responses are given on a scale from 1 (Never) to 5 (Very often). Scores for each subscale can be derived, as well as an overall secondary traumatic stress score. Validation research has demonstrated good psychometric properties of the scale (Bride et al., 2004).

Scores for the STSS can be categorised using scoring procedures presented by Bride (2007). There are five categories overall, with scores below the 50th percentile classified as little or no secondary traumatic stress, and further categories labelled as mild, moderate, high and severe secondary traumatic stress.

The Toronto Empathy Questionnaire (TEQ; Spreng et al., 2009; see Appendix 9). The TEQ is a 16-item self-report scale designed to provide a unidimensional tool for measuring dispositional empathy at its broadest level (Spreng et al., 2009). Items include *"I remain unaffected when someone close to me is happy"* and *"I can tell when others are sad even when they do not say anything"*. Responses are given on a scale from 0 (Never) to 4 (Always). The TEQ was chosen because other empathy measures, such as The Empathy Scale (Hogan, 1969) and The Interpersonal Reactivity Index (Davis, 1983) have been shown to measure constructs not directly relating to empathy, such as imagination, personal distress and social skills (Spreng

et al., 2009). Research suggests the single factor of empathy as measured by the TEQ has high internal reliability and convergent validity (Spreng et al. 2009).

Vignette questionnaire (See Appendix 10). In order to gain a measure of empathy that was more closely related to real-life practice, participants were presented with video vignettes, created for this study, of actors describing details of a rape (see above for a description of this procedure). Following each vignette participants were asked to rate the level of empathy they felt towards the victim via the single item that was constructed for this study: "*How much empathy do you feel towards this person?"* Responses were measured using a Likert scale ranging from 1 (None) to 7 (A lot). Participants were also asked to rate the severity of the account and how much they believed it for the purposes of the partner study (Glover, 2015).

Knowledge measure (see Appendix 11). In order to determine whether or not participants' awareness and knowledge increased following the training, a separate measure was developed that asked participants to give qualitative definitions of compassion fatigue, secondary traumatic stress and burnout. Participants were also asked about signs and symptoms of compassion fatigue, secondary traumatic stress and burnout, as well as what steps they could take to reduce or prevent them. Finally, participants were asked to rate how confident they felt in their responses using a Likert scale of 1 (no confidence) to 7 (complete confidence).

In order to score the knowledge measures, model answers for each item were devised by the researchers. Model answers were based on the definitions provided in the training (see Appendix 12 for the model answer sheet). For each

answer, one point was given for each correct statement made, although not for synonyms or repetitions of the same answer. Initially, each researcher independently scored ten measures each, based on the model answers. Scores were then compared and any discrepancies identified and discussed. This led to modifications of model answers and identification of appropriate synonyms for correct responses. The entire data set was then scored based on the revised set of model answers.

Demographics questionnaire (see Appendix 13). Participants were asked to complete a demographics questionnaire that included items relating to their age, gender, ethnicity, job title, role and rank, years of service overall and in SOECA, and the borough in which they worked.

Data Analysis

The Statistical Package for Social Sciences (SPSS) version 21 was used for statistical analyses. The normality of distributions for key variables was checked using histograms and skewness and kurtosis calculations.

Results

Participant demographic information

Overall, 142 participants took part in the training intervention. All participants were police officers working in the London Metropolitan Police Service's Sexual Offences, Exploitation and Child Abuse (SOECA) command. The SOECA command is divided into adult (referred to as SOECA-2) and child (SOECA-5) teams, and across different boroughs of London. Details of the demographic

characteristics of participants are found in Table 2. While the training intervention was offered to all SOECA staff, only those with Police Constable (PC) or Detective Constable (DC) ranks had regular contact with victims in their roles. Of the 142 participants, 137 completed the pre-training measures, 111 completed post-training measures, and 38 completed follow-up measures. For missing data, items were scored using the overall mean from the measure, or using a mean score for the appropriate subscale where applicable (i.e. STSS and ProQOL).

For analyses relating to the effectiveness of the training, e.g. for knowledge measures, all participants were selected. Parametric analyses were conducted where variables were normally distributed. Analyses that related to the years of experience of working in SOECA were non-parametric, as this distribution deviated from normal.

What levels of compassion fatigue, secondary traumatic stress and burnout were reported?

For the purpose of these analyses, only the scores of participants who have regular contact with victims were used (PC and DC ranks; N = 113). Using the self-score methods described in the ProQOL manual, participants' scores on the compassion fatigue and burnout subscales were categorised and ranked as low, average or high. For compassion fatigue (*M* = 18.4, *SD* = 4.7), around 84% of participants' scores ranked as being low, with 16% as being average and none as high. For burnout (*M* = 25.3, *SD* = 6.1), around 33% of participants' scores ranked as low, with 67% falling in the average category, and none ranked as high.

Table 2. Participant demographic characteristics

Demographic characteristics	**n**	**%**
Gender		
Female	88	62
Male	53	38
Age		
25-34 years	47	33
35-44 years	54	38
45-54 years	35	25
54 and over	5	4
Ethnicity		
White British	124	89
White Irish	2	1
White Other	3	2
Indian	3	2
Black Caribbean	3	2
Black African	2	1
Black Other	1	< 1
Asian Other	1	< 1
White and Asian	1	< 1
Team		
SOECA-2 (adult)	91	66
SOECA-5 (children)	44	32
Both	4	2
Rank		
Police Constable	59	42
Detective Constable	54	38
Detective Sergeant	23	16
Detective Inspector	4	3
Other	2	1
Years of experience		
Overall	M = 13.1 SD = 6.7 Range = 3-30	
In SOECA	M = 1.7 SD = 2.4 Range = 0-10	
In SOECA (induction)	M = .74 SD = 1.8 Range = 0-9	
In SOECA (satellite teams)	M = 3.4 SD = 2.2 Range = .2-10	

Using the categories described by Bride (2007), participants' secondary traumatic stress scores (*M* = 32.5, *SD* = 10.6) were ranked according to severity. Around 74% of participants fell into the bottom two categories, indicating little, no or mild secondary traumatic stress. Around 26% fell into the moderate, high and severe categories (see Table 3). Compassion fatigue, secondary traumatic stress and burnout were all positively correlated with each other (see Table 4).

Main hypotheses

Hypotheses 1 and 2: Relationships between empathy, compassion fatigue and secondary traumatic stress

To test these relationships, Pearson Correlation analyses were conducted. Empathy was measured using both the TEQ and a mean empathy score taken from the three vignette ratings from before the training intervention. There were no significant associations found between either compassion fatigue or secondary traumatic stress and empathy as measured by the TEQ or the vignettes (see Table 5).

Because a large subgroup of participants had not worked in the SOECA command for very long, it is possible that their relative lack of exposure to victims influenced the relationships between empathy, compassion fatigue and secondary traumatic stress. Therefore, exploratory correlation analyses were also conducted to determine whether associations between empathy, compassion fatigue and secondary traumatic stress applied for a sub-group of participants who had worked in SOECA for at least 12 months (N = 40). The same analyses as above were conducted and similar non-significant patterns were found.

Table 3. STSS category data

STSS Category	Range	Frequency	%
Little or no	0 - 28	37	35
Mild	28 - 37	41	39
Moderate	38 - 43	12	11
High	44 - 48	8	8
Severe	> 48	8	8

Note: N = 113

Table 4. Correlation statistics between compassion fatigue, secondary traumatic stress and burnout

	CF	STS	BO
CF		.65 $p < .001$	.56 $p < .001$
STS	.65 $p < .001$		.66 $p < .001$
BO	.56 $p < .001$	.66 $p < .001$	

Note: CF = Compassion fatigue, STS = Secondary traumatic stress, BO = Burnout

Table 5. Correlation statistics between empathy and compassion fatigue, secondary traumatic stress and burnout

	Compassion fatigue	Secondary traumatic stress	Burnout
TEQ total	.05, $p = .62$	- .08, $p = .40$	-.32, $p = .001$
Vignette empathy	- .17, $p = .22$	- .09, $p = .53$	-.25, $p = .07$

Note: N = 113

Hypothesis 3: Did the training intervention increase participants' knowledge of compassion fatigue, secondary traumatic stress and burnout?

A within groups t-test was conducted to compare the difference in knowledge measure scores pre and post-training (see Table 6). There was a significant increase in knowledge scores pre-training and post-training ($t(121) = -4.5$, $p < .001$), with a small to medium effect size ($d = - .44$; Cohen, 1992). A repeated

Table 6. Knowledge measure mean scores

Time point	N	M	SD
Pre-training	135	4.24	2.00
Post-training	127	5.20	2.29
Follow-up	37	5.54	2.01

measures ANOVA showed that there were differences in knowledge scores between pre-training, post-training and follow-up (F(1, 32) = 11.9, p = .002). Post-hoc analyses suggest that knowledge had increased at follow-up, compared with pre-training.

Hypothesis 4: Is there a change in compassion fatigue and secondary traumatic stress scores at follow-up?

Repeated measures ANOVAs were conducted with Bonferroni post-hoc comparisons. Compassion fatigue scores were significantly different between pre-training, post-training and follow-up ($F(1.6, 45.8) = 7.1$, $p = .004$), with pairwise comparisons suggesting that scores were higher at follow-up than both pre and post-training. Mauchly's test showed that assumptions of sphericity had been violated ($X^2(2) = .72$, $p = .01$), so degrees of freedom were corrected using Huynh-Feldt estimates. However, given the relatively low number of responses at follow-up, these findings should be treated with caution. The same analyses suggested that secondary traumatic stress scores did not differ between the three time points.

Hypothesis 5: How was the training intervention received?

When giving feedback, 86% of participants rated the item: "I know more about compassion fatigue and how that may impact on my work" as either 6 or 7 (Strongly

agree). In terms of what elements of the training participants found most helpful, responses fell into two broad categories:

1. Recognising and understanding compassion fatigue and 'giving a name' to what they were experiencing:

"Learning to recognise and be allowed to have these feelings and emotions"

"Compassion fatigue as most relevant to my role and feel I have experienced"

"Very useful. Glad to learn about compassion fatigue and realise I'm not weird"

2. How to tackle compassion fatigue and stress, with many participants commenting on how useful the mindfulness exercise was:

"Compassion fatigue and how to help me deal with it for myself"

"Compassion fatigue and how to cope better. Mindfulness exercise. Identifying signs of stress – dealing with them"

In terms of what elements of the training participants did not find helpful, feedback was very mixed. For example, some participants reported that the training was too long, whereas others said they would have preferred it to be longer and more detailed. Some participants reported that they did not find it helpful to view videos of victims giving accounts of rape, and that it was hard to give completely accurate responses in such a short space of time.

When given the opportunity to provide any further comments, two recurrent themes were apparent in participants' responses:

1. Officers require more support from their employers to help cope with the challenges of doing their work:

"I would passionately like to see proper recognition for the work we do and be able to offer regular counselling to all our staff. Our partner agencies all have access to this – how can we do without?"

"We would love to be able to incorporate exercise (de-stresser) into our day but we have no facilities to do so"

"Explore coping mechanisms more. Making these part of working life, not just suggestions at a training input."

2. The training should be delivered across the police service, so that others can benefit and so that people in senior positions understand the difficult nature of the job:

"The training should be rolled out to more officers. Lack of awareness about key aspects of stress"

"More info about how to cope with compassion fatigue and what line managers should be doing to help"

"Give this presentation to senior officers to give them an understanding about what stresses frontline officers"

While the training was aimed at officers who were 'on the ground' dealing directly with victims, some managerial and supervisory staff also attended. Some of these participants expressed that they would benefit from further information about how they can identify signs of compassion fatigue in their staff and steps they can take at a managerial level to help.

Self-help strategies reported at follow-up

As part of the follow-up questionnaires, participants were asked to describe which, if any, of the self-help measures described in the training they had since put into practice. In total, 17 participants responded to this item. The most commonly reported self-help strategy was mindfulness, with several participants saying that they had embarked on regular mindfulness practices and made use of mindfulness smartphone applications.

Relaxation techniques were also commonly reported, such as deep breathing and participants taking small amounts of 'time out' during their working days in order to practice these techniques and gain some distance from their work. Some participants described self-care practices such as exercise, creating a good work-life balance and reconnecting with hobbies. Finally, some participants reported that they had begun to speak and debrief with colleagues more, with one saying that they had been given the confidence to ask for help if they needed it.

Exploratory analyses

A number of additional exploratory analyses were conducted. It is acknowledged that the risk of making a type one or 'false positive' error was therefore inflated.

Are compassion fatigue and secondary traumatic stress related to years of experience?

Participants who had spent longer working in SOECA had higher compassion fatigue and secondary traumatic stress scores, albeit with small to medium effects. Importantly, these results were not replicated when comparing these variables with years of overall experience, suggesting that something specifically related to

working in SOECA increases compassion fatigue and secondary traumatic stress over time (see Table 7). Mediation analysis was carried out and suggested that burnout accounted for the relationships between years' experience in SOECA, compassion fatigue and secondary traumatic stress.

Comparisons were then made between participants who had worked in SOECA for less than a year (N = 67) with those who had been in the role for a year or more (N = 40). Independent samples t-tests were conducted. Those who had been in the role for a year or more (M = 37.0, SD = 11.7) had higher secondary traumatic stress scores than those in role for less than a year (M = 29.8, SD = 9.0; $t(104) = 3.6$, $p = 0.001$), with a medium effect size (d = .69). The same comparisons suggested that compassion fatigue scores did not differ between these two groups.

Analyses were begun to investigate whether empathy played any role in mediating the relationship between the number of years spent working in SOECA and compassion fatigue and secondary traumatic stress. However, initial correlation analyses between both measures of empathy and time spent working in SOECA were not significant. This meant that the second of the four steps required to establish mediation had not been fulfilled (Baron & Kenny, 1986), suggesting that empathy does not play a mediating role in this relationship.

Do compassion fatigue and secondary traumatic stress scores differ between SOECA teams?

Comparisons were conducted between participants working with adults in the SOECA-2 (N = 72) team and those working with children in SOECA-5 (N = 34). Those working with adults reported higher levels of secondary traumatic stress than

Table 7. Spearman's Rho correlation statistics between years of experience in SOECA, overall years of service, compassion fatigue and secondary traumatic stress

	Compassion fatigue	Secondary traumatic stress	Burnout
Time spent working in SOECA	.26, p = .008	.40, p = .0001	.39, p = .0001
Years overall service	.02, p = .82	- .010, p = .92	.02, p = .84

N = 113

those working with children. Differences in compassion fatigue scores were not significant (see Table 8). An independent groups t-test showed that participants working in SOECA-2 (M = 2.2, SD = 2.4) had more years of experience in their role than those in SOECA-5 (M = .6, SD = 2.0; t(103) = 3.4, p = .001), which may explain the observed differences.

Burnout

Because the ProQOL also contains a burnout subscale, analyses were conducted to investigate burnout in relation to the main hypotheses as described above. Lower burnout was related to high dispositional empathy as measured by the TEQ (see Table 5 above), with higher burnout related to having more years of experience working in SOECA (see Table 7 above). An independent samples t-test suggested that participants who had worked in SOECA for more than a year (M = 27.4, SD = 6.0) had higher burnout scores than those who had worked there for less than a year (M = 24.1, SD = 5.8; t(105) = 2.8, p = 0.006), with a medium effect size (d = .56). Burnout scores did not differ between pre-training, post-training and at follow-up. Participants working with adults in the SOECA-2 team experienced higher levels of burnout than those working with children in the SOECA-5 team (see Table

Table 8. Mean differences in compassion fatigue, secondary traumatic stress and burnout scores between participants in SOECA-2 and SOECA-5

	CF			STS			BO		
	M	*SD*	*t(df)*	*M*	*SD*	*t(df)*	*M*	*SD*	*t(df)*
SOECA-2	18.87	4.01	1.7(102) $p = .09$	33.50	12.35	2.5(104) $p = .012$	26.87	5.80	4.0(102) $p < .001$
SOECA-5	17.26	5.16		27.53	8.49		22.26	4.80	

Note: CF = Compassion fatigue, STS = Secondary traumatic stress, BO = Burnout

8), although, as above, this may be explained by the relative difference in years of experience between these two groups.

Discussion

The present study aimed to investigate the psychological impact of working with victims of rape and sexual assault on a specialist group of police officers, with a particular focus on compassion fatigue and secondary traumatic stress. Specifically, it aimed to investigate the relationship between these concepts and empathy, both dispositional and situational. Based on Figley's model, it was hypothesised that highly empathic officers, i.e. those with high dispositional empathy, would have higher levels of compassion fatigue and secondary traumatic stress. Additionally, it was hypothesised that those with higher levels of compassion fatigue and secondary traumatic stress would feel less situational empathy towards victims. This was measured by asking officers to rate how much empathy they felt towards victims who gave accounts of a rape via a video vignette. Furthermore, exploratory analyses were conducted to see whether compassion fatigue and secondary traumatic stress increased over time, as well as what role burnout might play in these relationships.

A brief training intervention aimed at increasing awareness of compassion fatigue, secondary traumatic stress and burnout, as well as self-help strategies, was designed and delivered for the purposes of the present study. A further aim was to explore the usefulness of this intervention in terms of increasing knowledge and whether or not it was well received by this population.

Summary of findings

Empathy, compassion fatigue, secondary traumatic stress and burnout

Participants' compassion fatigue scores were mostly low compared against given norms, with a large proportion scoring in the average range for burnout. Compared with compassion fatigue, a higher proportion of participants scored in average and above ranges for secondary traumatic stress.

There were no associations found between dispositional or situational empathy, compassion fatigue and secondary traumatic stress. However, higher dispositional empathy was associated with lower burnout.

Years of experience, compassion fatigue, secondary traumatic stress and burnout

Higher levels of compassion fatigue, secondary traumatic stress and burnout were all related to having more years of experience working in the SOECA command, suggesting that the longer officers had spent working in that role the greater their levels of compassion fatigue, secondary traumatic stress and burnout. None of these constructs were related to officers' overall years of police service. Officers who work with adults in the SOECA-2 team had higher levels of secondary traumatic stress and burnout than those who work with children in SOECA-5.

Impact of the training intervention

The training intervention was well received, with most officers reporting that they had learned more about compassion fatigue, secondary traumatic stress and burnout. Findings from knowledge measures supported this claim, with scores increasing immediately after the training and maintaining over time. Qualitative feedback from participants suggested that they welcomed the training intervention, with some calling for it to be delivered more widely in the police service, greater recognition of the demands of the work and more support at an organisational level.

Discussion of main findings

Empathy

The hypothesis that officers with higher amounts of dispositional empathy would be more likely to experience compassion fatigue and secondary traumatic stress was not supported. This finding challenges the model of compassion fatigue which proposes that highly empathic individuals are more likely to develop compassion fatigue and secondary traumatic stress. One possible explanation for this finding is that dispositional empathy alone is not sufficient to explain the development of compassion fatigue and secondary traumatic stress, and that only through empathic interactions with others can these difficulties develop. However, because no associations were found between situational empathy and compassion fatigue and secondary traumatic stress, this counter-hypothesis is also not supported.

The fact that no associations were found between situational empathy and compassion fatigue and secondary traumatic stress suggests that officers' empathy towards victims was not being affected by compassion fatigue and secondary traumatic stress. One explanation for this is that levels of compassion fatigue and secondary traumatic stress were not high enough to affect how much empathy officers felt. It is not the case however that all officers' compassion fatigue and secondary traumatic stress scores were low. Furthermore, the amount of compassion fatigue and secondary stress required to affect empathy levels is not discussed in the literature.

Because Figley's model was created in a psychotherapy context, it may be that there are inherent differences between psychotherapy and police interview work that explains these findings. For example, the process or depth of empathic engagement may be more intense or intentional in psychotherapy, motivated by knowing how important empathy is for a good therapeutic relationship (Rogers, 1957). However, if psychotherapeutic empathy were the only means by which compassion fatigue developed, that would not explain why many studies have demonstrated the existence of compassion fatigue and secondary traumatic stress in different helping professions.

As yet there is little research evidence that has tested the links between empathy, compassion fatigue and secondary traumatic stress in different ways. Figley's theoretical model would benefit from such evidence to support its claims. The findings from the present study, despite its limitations, do not lend support to the links between empathy and compassion fatigue and secondary traumatic stress.

Burnout

While not included in the main hypotheses, exploratory analyses found that lower burnout was associated with higher dispositional empathy. Some studies have shown a similar inverse relationship between empathy and burnout (Brazeau, Schroeder, Rovi, & Boyd, 2010; Thomas, Dyrbye, & Huntington, 2007), and suggested that this indicates that burnout leads to reduced empathy. However, these studies asked participants to rate how much empathy they had felt recently towards those they were helping, rather than their dispositional empathy.

In contrast, one previous study found that high dispositional empathy was related to high burnout, and hypothesised that high empathy might predispose helping professionals to emotional exhaustion and burnout (Williams, 1989), in a similar way that is proposed for compassion fatigue and secondary traumatic stress. The mechanism for this relationship however was not discussed.

What is not clear from these findings is the direction of the relationship between empathy and burnout. The present study followed the assumption that the TEQ measured dispositional empathy and that those with higher TEQ scores would be more likely to have high compassion fatigue and secondary traumatic stress. It is not clear that this assumption should be applied to burnout because burnout incorporates stressors over and above those created via empathic engagement with victims, e.g. contextual pressures of the work environment.

However, if this assumption were applied to burnout, this finding would suggest that officers who were highly empathic were actually less likely to develop burnout. This claim is supported by some, who suggest that empathy serves to

protect helping professionals against stress and burnout by making clinical practice more meaningful (Halpern, 2003; Roter, Stewart, Putnam & Lipkin, 1997), although whether this relates to dispositional or situational empathy was not specified.

Findings from the present study did not suggest that officers who had higher burnout actually felt less empathy towards victims, because it was not related to empathy as measured by the vignettes. Our understanding of these relationships would benefit from longitudinal research. Nevertheless, these findings do lend some support to the idea of high empathy playing some sort of protective role in the development of burnout.

Years of experience in SOECA

Higher levels of compassion fatigue, secondary traumatic stress and burnout were all related to having more experience working in SOECA, but not related to overall years of police service. This suggests that there is something specific about the demands of working in SOECA compared with police work more generally, that make the development of compassion fatigue, secondary traumatic stress and burnout more likely. This finding is supported by the literature which suggests that exposure to traumatic material and engagement with people who have experienced trauma are required for these problems to develop (Bride, 2007; Figley, 1995).

Previous research has also supported this finding. One study from the field of mental health care suggested that the length of time spent working in a children's hospital predicted higher levels of both compassion fatigue and burnout (Robins et al., 2009). This was explained using a cumulative stress model, in that greater exposure over time to the trauma of others increases the risk of distress

(Figley, 1995; Flannelly, Roberts & Weaver, 2005). However, these relationships are not universally endorsed, as some studies have failed to find any relationships between time spent working in a helping profession and compassion fatigue, secondary traumatic stress and burnout (e.g. Boscarino, Figley & Adams, 2004; Thompson, Amatea & Thompson, 2014).

Interestingly, the present study found that the relationships between length of time spent working in SOECA, compassion fatigue and secondary traumatic stress were mediated by burnout. One possible explanation for this relates to the conceptual similarities between compassion fatigue, secondary traumatic stress and burnout, or that they could share some common variable, such as exhaustion. Whilst this is possible, secondary traumatic stress in particular stands apart from burnout in that it is does not necessarily develop over time, and relates to the anxious responses to hearing traumatic material, as opposed to a gradual wearing down of resources and ability to cope.

One hypothesis is that over time police officers become increasingly burnt out and that this physical and emotional exhaustion leaves them with fewer resources for managing the effects of being exposed to traumatic material. For example, they may feel too exhausted to engage in regular exercise or other hobbies, or burnout might lead to a reduction in their emotional resilience. This might then leave them more susceptible to developing compassion fatigue and secondary traumatic stress.

Usefulness of the training intervention

Most officers rated that they learned a lot about compassion fatigue, secondary traumatic stress and burnout from the training. This was reflected in their scores on the knowledge measures. These findings tentatively suggest that a training intervention of this nature is useful. However, more work is required to determine whether an increase in knowledge and awareness leads to any changes in practice or in the uptake of self-help strategies. It is likely that further interventions and organisational support are required in order to give officers effective support in their roles. Although not formally measured, a large number of officers who attended the training expressed how important it was to have the difficult nature of their work recognised.

Findings showed that levels of compassion fatigue, secondary traumatic stress and burnout did not reduce following the training, despite officers reporting it to be useful. There are many possible explanations for this. It may be that the self-help strategies described in the training are not effective, although previous research has suggested that similar interventions are useful (Potter et al., 2013). Alternatively, it may be that the strategies were not implemented on a wide scale following the training, with only 17 participants reporting at follow-up what strategies they have since used. Even then, it is not known to what extent they were implemented. Additionally, the relatively low response rate at follow-up may not have been sufficient to detect any significant changes.

Of the self-help strategies suggested in the training, mindfulness was the one most commonly reported as being useful in the feedback and at follow-up. The usefulness of mindfulness has been proposed by some research which suggests that

individuals who have higher levels of dispositional mindfulness are less prone to compassion fatigue and secondary traumatic stress (Thieleman & Cacciatore, 2014; Thomas & Otis, 2010; Thompson et al., 2014). What these studies do not show however is whether the extent to which mindfulness is actually put into practice relates to the prevention of compassion fatigue and secondary traumatic stress.

Limitations

Empathy measures

In order to explore the relationship between empathy, compassion fatigue and secondary traumatic stress, a number of assumptions were made about the way in which empathy was measured that may have affected the validity of the findings. For example, it was assumed that the TEQ would be a sufficient measure of dispositional empathy, rather than a measure of empathy felt towards victims specifically. While the measure does not ask participants to reflect on their recent experiences or feelings towards victims, it is possible that it was interpreted in this way by some. It was also assumed that this measure of empathy reflected how empathic a person is generally and as such is not something that would change situationally.

While many steps were taken to ensure that the video vignettes were as realistic as possible, there is no doubt that watching a video of an actor is not representative of the work that officers do on a daily basis. It is possible therefore that ratings of empathy that participants gave in response to the vignettes was not reflective of how they truly tend to feel towards victims in their role. The present

study was also restricted by the fact that only a proportion of officers were able to rate the vignettes and as such give a measure of situational empathy.

Measuring compassion fatigue and secondary traumatic stress

There is some inconsistency in the way compassion fatigue and secondary traumatic stress are defined and the relationship between the two concepts. For the purposes of the present study they were considered as separate constructs, and two measures (ProQOL and STSS) used to measure each respectively. It is not clear however whether the ProQOL and STSS do in fact measure mutually exclusive constructs. Many of the ProQOL items are similar to those on the STSS, such as *"I feel as though I am experiencing the trauma of someone I have [helped]"*, and there are no items that appear to directly reflect effects such as an erosion of empathy over time, despite the fact that this is deemed to be a characterising factor in compassion fatigue. Because it is so widely used, the ProQOL was taken to be a measure of compassion fatigue, with the STSS used to measure secondary traumatic stress. This decision was made with a caveat however regarding uncertainty about how discriminating these two measures are.

Study design

The use of a cross-sectional design was not sufficient to provide a thorough examination of the relationships between empathy, compassion fatigue and secondary traumatic stress. By using a cross-sectional design, it was only possible to conclude whether or not these concepts were related, but not the direction of these relationships. For example, if participants with higher levels of compassion

fatigue and secondary traumatic stress did have low empathy scores, this would not indicate which of these came first.

The present study attempted to overcome this problem by measuring both dispositional and situational empathy, on the assumption that the former would provide a stable measure of empathy that would serve as a predictor of compassion fatigue and secondary traumatic stress; and the latter as a measure of how much empathy was actually felt towards victims. Nevertheless, a longitudinal design would be preferable, in order to test whether empathy, or indeed compassion fatigue and secondary traumatic stress change over time.

Sample

The sample of participants was very mixed in terms of their level of experience of working in the SOECA command. In order to test the effects of compassion fatigue and secondary traumatic stress it would have been preferable to use a sample of officers who had been in role for a substantial length of time. However, because of difficulties in recruiting participants and time constraints, many participants had only joined the SOECA command very recently. It is not reasonable to expect that officers who had very little contact with victims would have developed any signs of compassion fatigue and secondary traumatic stress; which is perhaps supported by the positive relationship between years of experience and compassion fatigue and secondary traumatic stress. Only a sub-group of participants therefore had any substantial experience in working with rape victims.

Because only a sub-group of participants viewed and rated the video vignettes, fewer participants were able to provide measures of situational empathy. This means that there may not have been enough statistical power in correlations between situational empathy and other constructs, in order to detect significant associations.

Demand characteristics

While the feedback regarding the training intervention was positive, it is possible that participants were more likely to give positive feedback in the presence of the researchers. Feedback was provided anonymously, but it would have been preferable for it to have been given a short time after the training, and submitted online perhaps, so that the researchers were not present at the time.

Potential knowledge measure bias

While participants' knowledge was found to increase following the training intervention, it is possible that the way in which the measures were scored was open to bias. It would have been preferable for scoring to be carried out by an independent rater, and for inter-rater reliability to be measured.

Implications

Despite its limitations, the present study provides further evidence to add to the literature on the development of compassion fatigue and secondary traumatic stress. The findings from the present study do not support the assumption that empathy is directly related to the development of compassion fatigue and secondary traumatic stress. Nor do the findings suggest that individuals with higher

levels of compassion fatigue and secondary traumatic stress feel less empathy towards those they are helping. If these findings were to be corroborated by more robust, longitudinal research it would call into question these assumptions and suggest a re-working of Figley's model of compassion fatigue, at least in so far as it can be applied to this specific population.

While the levels of compassion fatigue, secondary traumatic stress and burnout reported were not very high, there was a proportion of officers who were experiencing average levels of burnout and average to high levels of secondary traumatic stress. Given that a large number of these officers were new to the SOECA command, and the apparent effects of time spent working in SOECA, it is reasonable to assume that there are risks associated with this work that render officers vulnerable to developing psychological difficulties. While the links between these effects and empathy remain unclear, the psychological well-being of these officers is surely important not only for their professional quality of life but for the quality of service they provide for victims of rape.

Given that compassion fatigue, secondary traumatic stress and burnout all appeared to increase over time, it is important for the Metropolitan (and other) Police Service(s) to raise awareness of these issues to officers in the SOECA command. Anecdotal evidence from officers suggested that they would benefit greatly from extra support in the face of challenging work, providing empathy to a population that is highly likely to be traumatised, on top of the contextual pressures of working with the criminal justice system. While the use of self-help strategies has the potential to be of benefit to officers, organisational support such as supervision,

peer support groups, exercise facilities or professional emotional support could be invaluable in allowing officers to stay and be effective in this role for longer.

Greater recognition of the potential psychological challenges of working in this area could also serve to normalise these reactions and give officers confidence to speak about the challenges they face. Officers could also be encouraged, for example through refresher training, to practise self-help strategies, and to maintain their awareness of the potential for compassion fatigue, secondary traumatic stress and burnout to develop over time.

Future research

The present study highlighted a contradiction relating to compassion fatigue and secondary traumatic stress that as yet has not been sufficiently explored. On the one hand, it is suggested that highly empathic individuals are at higher risk of developing compassion fatigue and secondary traumatic stress. However, one of the effects of compassion fatigue and secondary traumatic stress is for the empathy of these individuals to decrease over time. The present study attempted to explore these relationships by measuring empathy in two different ways, and found no support for either of these claims. It may be however that only longitudinal research would allow for a thorough investigation of these associations.

Longitudinal methods would allow for measures to be taken when officers begin to work in the SOECA command, and then again at different follow-up points. From this we could determine whether those with higher dispositional empathy do indeed go on to develop compassion fatigue and secondary traumatic stress, as well as whether empathy felt towards victims reduces over time as a result. In addition,

further support for the present study's finding regarding burnout and empathy could be corroborated in a longitudinal design.

Figley's model has been criticised for not being explicit in terms of what types of empathy are involved in the development of compassion fatigue (Sabo, 2011). It would therefore be useful to measure empathy in different ways. In particular, an empathy measure that captures how much empathy is actually displayed by officers towards victims would be more externally valid. The Therapist Empathy Scale (Decker, Nich, Carroll & Martino, 2014) offers a method of 'in-session' empathy rating by a third person. Using a measure such as this would allow for empathy to be rated from videos of police interviews in a way that captures what actually happens rather than relying on self-reports.

It could be argued that the most important measure of empathy is one that is rated by the victim being interviewed, as it is the empathy that they perceive that has been linked to their decision to stay in the prosecution process (Maddox et al., 2011). Further research should consider testing associations between victims' perceptions of empathy and officers' experiences of compassion fatigue, secondary traumatic stress and burnout.

The finding that lower burnout was associated with higher dispositional empathy provides tentative support for the idea that empathically engaging with victims might serve as a protective factor against burnout. It would be interesting to explore this further, firstly to verify this finding, and secondly to examine the mechanisms by which empathy might reduce burnout. It has been suggested that empathic engagement can make helping professionals' work feel more meaningful

(Halpern, 2003), and qualitative research might explore this claim further. Many studies have found that professionals with higher levels of compassion satisfaction have lower compassion fatigue, secondary traumatic stress and burnout (e.g. Collins & Long, 2003; Simon, Pryce, Roff & Klemmack, 2006; Thomas & Otis, 2010), and further research could explore what role empathy might play in these relationships.

Because compassion fatigue, secondary traumatic stress and burnout all increased over time spent working in the SOECA command, it is important to investigate what can be done to help officers build resistance to these effects. The present study found that officers valued training on these subjects and future research could investigate the usefulness of similar interventions over time.

There was some evidence to suggest that mindfulness was well received by officers. Future research might test the effects of using mindfulness using an experimental design, such as comparing compassion fatigue and secondary traumatic stress levels in a group of officers who attend a regular mindfulness training programme and a control group who receive the intervention later. There is also scope for using a similar design to compare a range of interventions.

Given the difficulties in measuring compassion fatigue, secondary traumatic stress and burnout, it would be useful to use qualitative analysis to further explore the challenges that face police officers who work with victims of rape. Anecdotal evidence from the present study suggests that a whole range of contextual factors make officers' work very challenging. Such research could help to tease apart the factors that might lead to the development of compassion fatigue, secondary traumatic stress and burnout. It is not known from the current findings whether it is

indeed the nature of working with distressed and traumatised victims that causes these effects, or wider contextual stresses related to the work.

Although the ProQOL appears to be the most widely used measure of compassion fatigue, other measures are available and future research could make use of different measures, such as the *Compassion Fatigue Self-Test* (Portnoy, 1996). This measure looks subjectively different from the ProQOL and focuses more on the relationship between individuals and those they are helping. For example, it includes items such as: *When listening to someone's problems, I am more aware of their feelings than I am of my own feelings*, which, if used at different time points, might capture changes in empathy felt towards victims.

Because of the differences in secondary traumatic stress and burnout between participants in SOECA-2 and SOECA-5, it would be useful to investigate, perhaps qualitatively, how these roles differ, in order to explore why these differences occurred. It may be that those who work with adults are more likely to engage in an empathic relationship and hear more vivid traumatic accounts than those working with children.

A further way of corroborating these findings would be to compare different groups of police officers to determine whether there are differences in empathy, compassion fatigue, secondary traumatic stress and burnout between officers in different roles. It may be that officers who work with rape victims have similar difficulties to those who work with other traumatised victims such as violent crimes, whereas officers who are first responders to serious incidents may be more prone to post-traumatic stress reactions.

The limitations of the present study mean that any conclusions drawn should be done so with caution. Nevertheless many interesting questions have been raised that give scope for future research. The factors that make rape victims more or less likely to opt to stay in the prosecution process go well beyond their interactions with investigating police officers. Nevertheless it is important to investigate ways in which the police can help victims feel supported. Helping police officers themselves to maintain their own psychological well-being remains a useful avenue for indirectly helping victims and of ensuring the rate of convictions for rape continues to increase.

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Part Three

Critical appraisal

Introduction

In this critical appraisal I have outlined and discussed some of the challenges of conducting this research, as well as some of the more conceptual questions I have faced. The critical appraisal comprises three sections: working with the police, difficulties in defining key constructs, and implications of the research topic.

My decision to pursue research in this area was influenced by a long-standing interest in trauma. I was motivated to conduct a research project that had the potential to make real-life changes, alongside a wider interest in the potential for psychological ideas to be used to inform practice and promote change in different settings. The specific research ideas were formed after reading previous research papers conducted with the police (Maddox, Lee & Barker, 2011, 2012).

Amid public concern about low conviction rates for rape, it seemed important to investigate factors that might be influencing how and why victims might withdraw from the prosecution process.

Subsequently, the experience of conducting research in this area has coincided with my final year training placement working in a PTSD service. Working with victims of trauma myself has given me a real-life insight into the professional and personal challenges this brings, and drawing on my experiences of doing this project, I have been able to initiate discussions of compassion fatigue, secondary traumatic stress and burnout with the team in which I am based.

Working with the police

Working with a 'closed' organisation

Conducting research, particularly of a psychological nature, with the police can be a challenging process (Wise, 2010). There are many reasons for this. There is no doubt that an organisation as large, complex and important as the police faces a great deal of public scrutiny. While this might be enough to make the police as an organisation wary of allowing 'outsiders' into the system, others have suggested that the potential for research to lead to criticism of the police, as well as the tendency for research to probe potentially sensitive areas, such as mental health, can only serve to increase this suspicion (Dawson & Williams, 2009).

Ideas relating to anxiety in organisations are well established in psychology, particularly psychoanalysis (e.g. Bion, 1961, cited in Halton, 1994). In our initial meetings with representatives from the police, they highlighted the fact that there were significant levels of stress among officers, with a high incidence of sick leave being taken. There was a sense that this research project had the potential to be helpful, but coupled with a (perhaps unconscious) concern about bringing these issues to the surface, or regarding how we might disseminate the findings. To use the model of psychoanalytic consultation to illustrate this point, a group might view an outside 'consultant' as an object of both hope and fear; with an unconscious hope that the problem will be brought to the surface which is at the same time, perhaps the thing that the organisation fears (Halton, 1994).

In my experience of conducting this research with the police, challenges were indeed posed, some of which may be reflective of the anxieties described above. This was not the complete story, however, and the experience overall has been a positive one. From the beginning, individuals within the organisation were

supportive of the collaboration and very helpful along the way. The process was however long and within it many parties involved, which might reflect some institutional anxieties. Once the project had begun however, the response from participants was positive.

Because many parties were involved in the setup and implementation of the research, a lot of time was spent in the initial stages holding meetings with various teams and individuals. Contact was first made with the Metropolitan Police about the possibility of a research collaboration in May 2013, but the first participants were not recruited until September 2014, with considerable doubts about further recruitment continuing until late October. There were many individuals and teams from the organisation involved in the negotiation and implementation of the research. From my own personal reflections, most if not all individual members involved were very keen to collaborate, particularly once they were aware of the aims of the research. However, it was also apparent that as the number of people involved increased, so did the level of anxiety that seemed to surround the research.

As a research team, we were very aware that the collaboration could be terminated at any time, which would have rendered us without a research project and with little time to develop a new one. Needless to say this increased our own anxiety levels, given the time constraints involved in conducting a DClinPsy research project. These uncertainties around recruitment led to necessary compromises being made to ensure that the collaboration was able to go ahead, as discussed below.

Impact on recruitment

In my research proposal I had suggested that the sample for this study would be made up of specialist officers whose primary role is to interview and take statements from victims of rape (Sexual Offences Investigative Techniques (SOIT) officers). Because of their regular contact with victims who are likely to be distressed and/or traumatised, it seemed that they were the most suitable population for investigating compassion fatigue and secondary traumatic stress.

However, the only way in which we could progress with the research and deliver the training intervention was to be integrated within a series of existing induction training programmes. While this was a very accommodating and practical solution, it meant that a large proportion of participants were officers who had only recently joined the command. In other words, they had very little if any experience in interacting with victims of rape. These participants were unlikely to be experiencing the effects of compassion fatigue or secondary trauma, or if they were, it could not reasonably be attributed to their work with this population.

In an attempt to boost participant numbers, the training was offered to teams in different London boroughs (referred to as satellite teams). From this, participants with more experience in the role were recruited, and ideally a larger group of these officers would have made up the sample. If I were to conduct a similar project in the future, I would try to target these more experienced officers for recruitment.

Nevertheless, in order for the collaboration to be successful, it was necessary to adopt a flexible and accommodating stance. As a research team we

were very aware of being viewed with suspicion as 'outsiders' and endeavoured to be open and collaborative in order to mitigate as far as possible any anxieties felt towards us. This included working together with the police to develop the training material. We also agreed to disseminate findings to them internally at different stages in the form of 'interim reports' (see Appendix 14). We were very keen to be seen as being helpful and non-threatening throughout; an approach that is likely to have increased the likelihood of the collaboration being successful and mutually beneficial.

When the initial ideas for the research were conceived, we were sceptical about whether the police would be willing to collaborate on a project of this nature. Ultimately, despite the challenges faced along the way, it was a privilege to be able to work with the police and provided an invaluable experience in working alongside a different organisation as a psychologist and 'giving psychology away' (Miller, 1969); sharing psychological ideas with different professions.

Difficulties in defining key constructs

Why compassion fatigue?

The decision to investigate compassion fatigue specifically was taken following previous research that suggested that some police officers might be displaying more empathy than others when taking accounts from and interviewing rape victims, and that this empathy might be related to the victim's willingness to stay in the criminal justice process (Maddox et al., 2011). From what I had read about the effects of compassion fatigue, a consistent notion was that it can make it

harder for individuals to feel and display empathy to those they are engaging with and helping.

What exactly is compassion fatigue (and what is it not)?

When I started to investigate the concept of compassion fatigue, I soon came to realise that it was a term that is used interchangeably with others, e.g. secondary traumatic stress. I have attempted to conceptualise these terms as clearly as possible in the empirical paper. The question remains however as to whether or not compassion fatigue is in fact conceptually distinct from these other constructs.

One of the earliest writings on compassion fatigue is detailed in the book: *Compassion Fatigue: Coping with Secondary Traumatic Stress Disorder in those who Treat the Traumatized* (Figley, 1995). In the first chapter, compassion fatigue is described as being a type of secondary traumatic stress reaction, suggesting that the defining characteristics of compassion fatigue are synonymous with those of secondary traumatic stress; such as those seen in PTSD. But more recently, it has been defined in terms of its effects on the individual, such as on the capacity to feel and display empathy (Elwood, Mott, Lohr & Galaovski, 2011; Mathieu, 2007). A further description of compassion fatigue states that it comprises a combination of burnout and secondary traumatic stress (Stamm, 2010).

The fact that these different descriptions exist perhaps reflects the conceptual uncertainty of compassion fatigue. If compassion fatigue is made up of a combination of secondary traumatic stress and burnout, this might suggest that the term compassion fatigue is in fact redundant. Taken as separate constructs

however, compassion fatigue, secondary traumatic stress and burnout are all potentially very useful. But compassion fatigue faces a number of challenges that need to be tackled before it can be fully considered as a valid construct in its own right. Below I have discussed what factors might make compassion fatigue distinct from these other terms, but also what questions remain to be answered in order to achieve clarity about its validity as a distinct construct.

Firstly, the fact that compassion fatigue and secondary traumatic stress are terms that are used interchangeably raises questions, because they suggest very different meanings just in the way they are named. Secondary trauma suggests just that; an anxious reaction to hearing another's traumatic account. The words 'compassion fatigue' however imply an exhaustion of or reduction in the ability to be compassionate; very different from secondary trauma. So the fact that they are used so interchangeably is questionable.

One counter argument to this might be that secondary traumatic stress *leads to* compassion fatigue. For example, anxious reactions to traumatic accounts might lead an individual to distance themselves emotionally as a form of defence, which in turn might reduce the compassion or empathy either felt or displayed towards those they are helping. This would join the two terms together but only by way of compassion fatigue being a specific effect of secondary traumatic stress, rather than being the same thing per se.

In further criticism of the term's ambiguity, some have argued that the term compassion fatigue is misleading because, as it is currently defined, it does not actually incorporate compassion, and its reliance on secondary trauma limits its

relevance to those not working with trauma victims (Fernando & Consedine, 2014). Indeed, many studies have been conducted with professionals who do not necessarily work with trauma victims, such as social workers (Badger, Royse & Craig, 2008), chaplains (Flannelly, Roberts & Weaver, 2005), nurses (Hegney, Craigie, Hemsworth, Moisson, Aoun, Francis & Drury, 2014), and doctors (Huggard & Dixon, 2011).

Secondly, it could be argued that compassion fatigue is actually just an effect of emotional exhaustion and therefore is not distinct from burnout. Burnout may actually be something over and above compassion fatigue because it incorporates physical exhaustion, which may be a response to contextual factors such as number of hours worked, rather than the interactions with and feelings towards those being helped. It is possible that compassion fatigue makes up one specific element of burnout, perhaps emotional exhaustion, which makes it difficult to carry on being compassionate over time.

As yet it is not clear what mechanisms are at play in the development of compassion fatigue. It has been suggested that empathy plays an important role (Figley, 2002), but the causal mechanisms here are not fully explained. Further work also remains to be done to explore how secondary traumatic stress and burnout actually combine in order to form compassion fatigue, as has been suggested (Stamm, 2010). For example, are they distinct concepts, or does the onset of one precede the onset of the other? It is possible for example that general burnout reduces an individual's capacity to deal with traumatic material and then leaves them vulnerable to secondary traumatic stress reactions. But this is just a

hypothesis that has not been tested, and it would not necessarily explain why a reduction in compassion or empathy would follow.

Another matter that is yet to be fully explored is the mechanism through which empathy is affected by compassion fatigue. Various explanations are possible but as yet remain to be examined closely. The subtle differences between empathy and compassion in relation to compassion fatigue have not been investigated. Some have suggested that different types of empathy might relate to compassion fatigue in different ways (e.g. Robins, Meltzer & Zelikovsky, 2009) and further research remains to be done to explore these relationships. As has been discussed in the present study, there is also a lack of longitudinal research that demonstrates a gradual reduction in empathy in relation to compassion fatigue, secondary traumatic stress and burnout. This is surely required in order to give further validity to compassion fatigue.

As well as longitudinal research, new measures are also required. The measures that are currently used to quantify compassion fatigue are indicative of the emphasis on secondary traumatic stress, rather than its effects such as empathy reduction. Until recently, older versions of the ProQOL measure used one subscale to measure compassion fatigue, conceptualised as being the same as secondary traumatic stress. Items on this subscale reflect this, e.g. *I feel as though I am experiencing the trauma of victims I have worked with*. The most recent version of the ProQOL operates on the assumption that compassion fatigue is a combination of secondary traumatic stress and burnout. However, these two subscales are not combined when scoring to give an overall 'compassion fatigue' score. If compassion

fatigue is going to be validated as a separate construct, measures might need to actually reflect the idea that empathy and/or compassion reduce over time.

The ProQOL is the most commonly used measure of compassion fatigue. However, other measures are available such as the *Compassion Fatigue Self-Test* (Portnoy, 1996). This measure appears to focus more broadly on emotional reactions and how individuals tend to position themselves within helping relationships. In hindsight it would have been useful to include both measures in the present study, in order to capture compassion fatigue in this population more wholly.

For the purposes of the present study, compassion fatigue was considered as a separate construct. In the research literature, some studies that use the ProQOL refer to the subscale as being a measure of compassion fatigue, whereas some call it secondary traumatic stress. The ambiguity of these terms was acknowledged in the present study. However, because a separate measure of secondary traumatic stress was also used (the STSS), the term compassion fatigue was used to avoid confusion.

Potential implications of the research topic

There are many potential reasons why this area of research is both an interesting and important one. Broadly speaking, the implications of such research fall into two categories: those affecting victims of rape and sexual assault, and those affecting professionals, specifically the police, who work with this population. My reflections here are not based on the assumption that the present study will have

far-reaching implications, as I imagine any impact will be modest. Instead they are based on what research in this area more generally could potentially offer.

Much more work is needed to tackle common narratives and negative social perceptions of rape victims, which is surely at least partly related to the difficulties in keeping victims in the judicial system once they have disclosed a rape. Any research or literature that can highlight the potentially traumatising psychological impact of rape on victims can only help to increase awareness and sympathy where misconceived myths and blame so often currently prevail.

Providing preventative interventions with police officers could have implications for individual officers' well-being, reduction in rates of absence through sickness or stress, and also indirectly for victims. For example, helping police officers to remain empathic over time could serve to improve victims' experiences of the prosecution process and perhaps make them more likely to stay with it despite its challenges. It is possible that speaking to the police will be the first time victims disclose in detail the account of their assault, and research tells us how important this first disclosure can be for victims' well-being and willingness to share it again (Ahrens, 2006).

My experience of delivering the training intervention to this population of the police revealed that many officers are finding it hard to cope with the difficulties of the job, for a number of reasons, perhaps related to compassion fatigue or burnout, or other external pressures and demands. What was clear from working with this group of police officers, is their care and compassion towards victims

coupled with a strong work ethic. But what was also clear was that many factors combine to make their job extremely challenging.

The present study is an example of how psychologists can work alongside different organisations and use ideas from psychology to make a difference. The police are perhaps a particularly important organisation to collaborate with and I was grateful that the London Metropolitan Police Service was so open to the idea of this research. Police officers often represent the 'front line' of services and may well be the first point of contact for people in psychological distress or long-standing mental health difficulties. Establishing successful collaborations such as research projects sets a useful precedent for the future. The service in which I am currently working, The Institute of Psychotrauma in East London, offers a good model for working with different teams and organisations, and is in fact in the process of creating a new service to be piloted, in which psychological support will be made available to police officers who witness traumatic incidents.

There may be a dominant narrative about police officers adopting positions of strength, using coping mechanisms such as humour to cope, and having concerns that showing emotion would risk their reputation (Evans, Pistrang & Billings, 2013). While such methods of coping are no doubt understandable and may be effective, psychological knowledge and research can potentially play a role not just in understanding the nature of these challenges, but also in normalising them and creating a culture where they can be discussed openly. Attending to the psychological and emotional needs of these officers could be vital not just for their

health and well-being, but for their service to and the experience of the victims with whom they are working.

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Appendix 1

Summary of joint project and each researcher's contributions

Summary of joint project and each researcher's contributions

The initial idea to conduct research in collaboration with the police was suggested by Naomi Glover, although the specific research topic and questions were devised by David Turgoose. Initial liaison with the London Metropolitan Police Service and participant recruitment was done jointly, in conjunction with Dr Lucy Maddox and Professor Chris Barker. The application for ethical approval was conducted jointly.

The devising, writing, editing and filming of the video vignettes was conducted jointly, as was the recruitment of actors. Data entry was also shared between both researchers. While the training interventions were delivered together, the training content and delivery for the present study was devised and carried out by David Turgoose. The demographics questionnaire was devised jointly. Interim reports of findings were written by Naomi Glover. Follow-up data was collected by David Turgoose.

All other elements of the present study were carried out by David Turgoose, including selection of measures, devising of the knowledge measure, scoring of the measures and write-up of the thesis. For the knowledge measure, initial scoring was done by both researchers in order to check for reliability and develop model answers, with remaining scoring being completed by David Turgoose.

Appendix 2

Participant information sheet

Information Sheet for participants in Research Studies

You will be given a copy of this information sheet.

Title of Project: **Training specialist police officers in the psychological aspects of sexual assault**

This study has been approved by the UCL Research Ethics Committee (Project ID Number):

We would like to invite you to participate in this research project.

What is this research about? Through this research we are hoping to find out more about the challenges police officers have in interviewing victims of rape and sexual assault. Victims of these crimes often suffer from trauma and shame, and we would like to give you the opportunity to learn more about these things as well as finding out what you already know. Furthermore, professionals who come face to face with traumatic stories on a regular basis could be at risk of high stress and burnout at work, often known as compassion fatigue. We would like to find out whether or not officers are at risk of compassion fatigue, and to help you find ways of dealing with it.

What would you be asked to do? If you were to take part in the research you will be invited to attend two training workshops. The first will focus on trauma and shame in victims of rape and sexual assault, with the second looking at ways of dealing with work stress and burnout. The workshops will include presentations from psychologists, as well as group discussions and activities. We will also be asking you to reflect on some of the cases you have seen in your current role.

You will also be asked to complete some questionnaires and respond to some vignettes before and after the workshops, as well as approximately three months afterwards.

How long do the workshops last for? Each workshop will last for one hour, so two hours overall.

Where will they take place? The location will be confirmed at a later date. It will be in Greater London.

What would you gain from taking part? Working with victims of rape and sexual assault can be rewarding yet challenging. These training workshops will give you the opportunity to learn more about the impact on victims and how this could explain some of the challenges you might face in interviews. They will also offer information and tips on ways to deal with stress at work. You will also be able to give valuable feedback about the training which will be used to improve the training offered in the future.

By taking part you will also be making a valuable contribution to our understanding of the impact of rape and sexual assault on the victims and the professionals who work with them. Once the research has been completed you will be offered a summary of the final report and findings.

What are the possible risks in taking part? Though we don't anticipate any risk in taking part in this study, we will be asking you to think about your work which, due to its nature, may be distressing for you to think about. If this is the case you will be able to leave the training for a brief period or withdraw your participation completely. You will also be able to speak to one of the researchers in private should you feel there are issues you would like to raise.

Will the information you give be shared with others? Anything you say or any answers you give in questionnaires will remain confidential.

What will happen to the results of the study? The results of this study will be disseminated in a number of ways:

- We will produce a summary document of the findings, which will be available to you. We will also give an oral presentation of the study to the Metropolitan Police Service.
- We will write an article and submit this to a peer-reviewed journal for publication
- Due to this study being part of doctoral theses projects at University College London, the final dissertations will be available at the University Library and online.

Who has reviewed the study? The research has been approved by the University College London Research Ethics Committee.

What if you change your mind? It is up to you to decide whether or not to take part. Choosing not to take part will not disadvantage you in any way. If you do decide to take part you are still free to withdraw at any time without giving a reason. Even if you decide to participate you would be free to withdraw at any time without repercussion. Because all of the information we gather will be kept anonymous, it would not be possible to remove your information if you decide to withdraw. If you decide to take part you will be given this information sheet to keep and be asked to sign a consent form.

Please discuss the information above with others, and feel free to contact us if there is anything that is not clear or if you would like more information.

All data will be collected and stored in accordance with the Data Protection Act 1998.

Researchers: David Turgoose, Naomi Glover, Prof. Chris Barker and Dr. Lucy Maddox

Address: Research Department of Clinical, Educational and Health Psychology, University College London, 1-19 Torrington Place, London, WC1E 6BT

Email: d.turgoose@ucl.ac.uk, naomi.glover@ucl.ac.uk, c.barker@ucl.ac.uk, maddox.lucy@gmail.com

Appendix 3

Participant consent form

Informed Consent Form for participants in Research Studies

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Project: **Training specialist police officers in the psychological aspects of sexual assault**

This study has been approved by the UCL Research Ethics Committee (Project ID Number):

Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you to decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Participant's Statement:

- I have read the notes written above and the Information Sheet, and understand what the study involves.
- I understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researchers involved and withdraw immediately.
- I consent to the processing of my personal information for the purposes of this research study.
- I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
- I understand that the information I have submitted will be published as a report and I will be sent a copy. Confidentiality and anonymity will be maintained and it will not be possible to identify me from any publications.
- I agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Participant's signature: **Date:**

Print name:

Researcher's signature: **Date:**

Appendix 4

Notification of ethical approval

UCL RESEARCH ETHICS COMMITTEE
GRADUATE SCHOOL OFFICE

Professor Chris Barker
Research Department of Clinical, Educational and Health Psychology
UCL

24th March 2014

Dear Professor Barker

Notification of Ethical Approval
Project ID: 5301/001: Training specialist police officers in the psychological aspects of sexual assault

In my capacity as Chair of the UCL Research Ethics Committee (REC) I am pleased to confirm that your study has been approved by the UCL REC for the duration of the project i.e. until September 2015.

Approval is subject to the following conditions:

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form'.

The form identified above can be accessed by logging on to the ethics website homepage: http://www.grad.ucl.ac.uk/ethics/ and clicking on the button marked 'Key Responsibilities of the Researcher Following Approval'.

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. Both non-serious and serious adverse events must be reported.

   Reporting Non-Serious Adverse Events
   For non-serious adverse events you will need to inform Helen Dougal, Ethics Committee Administrator (ethics@ucl.ac.uk), within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

   Reporting Serious Adverse Events
   The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

With best wishes for your research.

Yours sincerely

[redacted]

Professor John Foreman
Chair of the UCL Research Ethics Committee

Cc:
David Turgoose & Naomi Glover, Applicants
Professor Peter Fonagy, Head of Department

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Appendix 5

Video vignette scripts

Vignette scripts

Real 1

I was at the pub for someone's leaving drinks from work. I wasn't drinking myself because I'd had a chest infection recently and was still taking some antibiotics for that. After a few hours I decided to leave because I still wasn't feeling good so I thought it would be best if I went home.

This guy from work, Graham, who lives quite near me said he'd walk me home. I kind of wanted to just be on my own but he insisted so we started walking back together.

It was fine at first, but then he kept trying to grab my hand to hold it and at one point he pulled me towards him and tried to kiss me. I stopped him and said that I didn't think that anything could happen between us. I tried to be nice and say it was a bad idea because we work together but really I just didn't like him in that way.

So then he backed off for a bit, but then as we were walking through the park close to where I live he tried to kiss me again. This time he got a bit aggressive. I remember him holding onto both my shoulders really tightly and kissing me. And then he pushed me really hard onto the ground. I was so confused about what was happening I didn't really react.

Then he pushed me onto my front and really quickly he grabbed both my wrists and had them behind my back. I felt all of his weight on top of me. I kept trying to kick him and get away but I couldn't. And then he put his hand up my skirt and took off my underwear. I heard him undo his belt and then he was raping me. I felt this horrendous pain and I kept trying to scream for help but all his weight was pushing me into the ground and I couldn't catch my breath to make a noise.

I think about it all the time. I can still smell his aftershave all the time. It makes me feel sick. I want to do something because if I don't he'll do this to other people. I don't want anyone else to have to go through what I did.

Real 2

I was away for a week's conference with work. I'd only been at this company a few weeks ago so it was a bit of a big thing to attend an event like that. My boss had told me to use the opportunity well, you know meet people and make connections. So we were having dinner on night and everyone was planning to get go to the hotel bar and get drunk. I didn't feel like it but I still wanted to be sociable so I went to the bar anyway. It was fun at first but as people got more and more drunk I just felt like it was time for me to go to my room.

This other guy Andy was also leaving at the same time so got the lift together. His room was only a few doors away from mine and as we got to my door he asked me if I'd noticed how nice the view was from the rooms. As I opened the door to my room and he pushed past me and went straight over to my window to show me. I just thought this was a bit weird and knew I didn't want him in my room, but I didn't want to come across rude by asking him to leave.

Then all of a sudden pushed me against the window and started kissing me. He had his hands round my throat, not really tightly but it just meant I couldn't move. He was saying

things like he'd seen me at the conference and noticed how I'd been flirting with him but I can hardly remember ever speaking to him other than a few times when we were on the same table at dinner. I tried to be nice and said I was sorry for giving him that impression but that I had a boyfriend. Then he just got really angry and said that I'd been leading him on and he started pushing me towards the bed and I fell onto it. And before I knew it he was lying on top of me and was pushing up my skirt and I think that's when I realised what was happening. He started raping me. I just remember it hurting a lot and I was shaking and crying. It just seemed to go on forever. It was humiliating. I wanted to fight back but I just couldn't, or didn't. I think back now and wonder why I didn't do more but I think at the time I was worried he would hurt me even more. When he finished he just got up and left and I just lay there.

Mad 1

I'm not too sure where to start really. I can't believe this has happened to me again. The first time, it was a few years ago it was just some guy, I guess I just forgot about it until now. This is kind of bringing it all back. I've always been really on edge talking about this kind of thing and I don't even know why really. But since this thing happened I've been a nervous wreck.

My boyfriend thinks I'm mad, he says I'm making the whole thing up. He's always putting me down anyway. I'm just really confused. I was really drunk, his mate Darren kept making me do shots. There was a party at the house, and all his mates were staying over, he was taking the piss out of me all night, just the usual stuff but I hate when he does it in front of his mates, it makes me feel so stupid.

I remember being really pissed off because his mate smashed our TV. He fell on it, it just smashed. I was so annoyed. He didn't even apologise, I was the only one who was bothered. He kept telling me to relax, made me feel like I was a right idiot.

Jack went to bed, he was really pissed. I don't know what time, it was already getting light anyway, I was really tired and at first I wasn't really sure what was going on.

I thought he would say something like he was sorry or tell me to keep quiet. I just carried on drinking and he just carried on. I told him to stop a hundred times but I gave up in the end. I don't know what to do. It's like it never even really happened. I guess it's just me, can't do anything about it now, these things just happen don't they?

Mad 2

I was at this work do, it was a Christmas party. It was a great night, everyone was out. Everybody was really drunk so it was really quite funny. You don't normally get to see the people you work with drunk so it was hilarious. We just kept knocking them back. It was a free bar so…

One of the guys that I work with, he brought his mate along and we started chatting; he was really nice. I'd been off work sick for a while so I just wanted to let my hair down and have a fun you know. A couple of the girls said maybe I'd had too much to drink, but I they're just jealous. A few of us wanted to go to this club after. I remember being really

pissed off because we had to walk and it was freezing. Sarah threw up on the way, which is just disgusting. And it was freezing.

When we got there I said I wanted a drink and then it all a bit blurry. He picked me up and told me he'd look after me. It was really sweet. And to be honest I didn't really want to be in that club. I was still really angry with Sarah so I was happy to leave.

I think I pretty much passed out most through most of it anyway. I'm not sure but he seemed really angry so I was just like whatever, which is really weird because he'd been really nice before. I just wanted to pass out I was so drunk, I pushed him off a couple of times but he was a lot stronger than I was and it was better just to say nothing really. I just went home. I was meant to be back in at work but I but just rang in sick, I haven't really thought about it to be honest, it's just one of those things.

Bad 1

So I went out on a night out a few weeks ago with my friend Maria and we went to a club in town and met up with some of her friends. And there was this one guys Joe who I was chatting to and dancing with quite a bit and he seemed like a nice guy and he bought me drinks and stuff.

And then at about 2am it got really shit and the DJ was rubbish and we all just decided to go home. They came back to by house and I said to Joe that he could sleep on my floor. So I gave him some stuff to sleep on the floor but then he just got in my bed anyway and I didn't really want him to be there but I was like whatever. And then before we went to sleep he started kissing me and touching me and stuff so I was like "oh maybe you should sleep on the floor" because I didn't want anything to happen and then we went to sleep and then I woke up at some point in the middle of the night and he was just having sex with me and I told him to stop and tried to push him off but he wouldn't and so I just lay there and waited for it to end. It was really scary. Probably the most terrifying thing that's ever happened to me.

And then the next day he was gone and I didn't really want to say anything to Maria and I just want to forget about it. I have this big deadline coming up at uni and I can't really concentrate on that and deal with this so I just wondered if you guys could help me get an extension on that or something because I just don't think I'm going to be able to do it.

Bad 2

So I work in this bar and I've just been there a couple of months. The other day we were cleaning up and I was in the downstairs bar which is just a small one by itself and this guy who works there was there as well. I haven't worked with him very many times but I know him a little bit. Anyway he came down and I'd kind of worked out that he fancied me a little bit during the night because he'd been coming over to my section and making excuses to come and stand next to me but I was like whatever.

We always put on music and have a few drinks while we're clearing up because it makes the time go faster. And so we were doing that in the downstairs bar and he kept trying to dance with me and kiss me but I would just move away because he's actually quite boring

and I don't really fancy him. And then at some point he just got really forceful and he tried to kiss me and sort of push me into one of the booths. And well..you know.

I was pretty terrified and didn't really know what to do. You know stuff like this doesn't really happen to people like me. And I can't really do anything because we work together and I actually haven't been into work for a couple of days because I just can't face it. But if I don't go in then I don't get paid and I just wondered if there was anything that you guys can do. Maybe you could say something to my boss to help me get a bit of paid leave or something

Appendix 6

PowerPoint slides from training intervention

Appendix 7

Professional Quality of Life Scale (ProQOL)

Removed for copyright reasons

Appendix 8

Secondary Traumatic Stress Scale

Removed for copyright reasons

Appendix 9

Toronto Empathy Questionnaire

Removed for copyright reasons

Appendix 10

Video vignette questionnaire

Video vignette questionnaire

Video 1: Rachel

a) How much do you believe that this person's account is true and accurate?

1 2 3 4 5 6 7

Not at all Very much so

What factors did you take into account when giving the above rating?

……
……
…….

b) How much empathy do you feel towards this person?

1 2 3 4 5 6 7

None A lot

What factors did you take into account when giving the above rating?

……
……
…….

c) How severe would you rate this assault as being?

1 2 3 4 5 6 7

Not very severe Very severe

What factors did you take into account when giving the above rating?

……
……
…….

Video 2: Melissa

a) How much do you believe that this person's account is true and accurate?

1 2 3 4 5 6 7

Not at all Very much so

What factors did you take into account when giving the above rating?

……
……
…….

b) How much empathy do you feel towards this person?

1 2 3 4 5 6 7

None A lot

What factors did you take into account when giving the above rating?

……
……
…….

c) How severe would you rate this assault as being?

1 2 3 4 5 6 7

Not very severe Very severe

What factors did you take into account when giving the above rating?

……
……
…….

Video 3: Becky

a) How much do you believe that this person's account is true and accurate?

1 2 3 4 5 6 7

Not at all Very much so

What factors did you take into account when giving the above rating?

……
……
…….

b) How much empathy do you feel towards this person?

1 2 3 4 5 6 7

None A lot

What factors did you take into account when giving the above rating?

……
……
…….

c) How severe would you rate this assault as being?

1 2 3 4 5 6 7

Not very severe Very severe

What factors did you take into account when giving the above rating?

……
……
…….

Vignette 11

Knowledge questionnaire

Compassion fatigue questionnaire

Parts of today's training will cover the topic of Compassion Fatigue. In order to help us make the training as useful as possible, we would like to get an idea of what you may or may not already know about it. We are not expecting you to have any prior knowledge of Compassion Fatigue necessarily, so don't worry if you are not sure how to answer any of the questions below.

If you are not sure, please provide your best guess as far as possible, and answer all questions. All responses will remain anonymous and confidential.

1. Have you heard of the term Compassion Fatigue before?

Yes …… No……

(Go to 1A) (Go to 1B)

A) If yes, please state briefly what you understand by the term Compassion Fatigue

B) If no, please state briefly what you think Compassion Fatigue might be

2. What signs might you notice within yourself if you were suffering from Compassion Fatigue?

3. If you were suffering from Compassion Fatigue, what could you do to help yourself?

4. What might you notice about a colleague if they were suffering from Compassion Fatigue?

5. What do you understand by the term Secondary Traumatic Stress?

6. What do you understand by the term Burnout?

7. Overall, how much confidence did you have in the answers you have provided above?

No confidence 1 2 3 4 5 6 7 Complete confidence

Thank you

Appendix 12

Knowledge questionnaire scoring sheet

Knowledge questionnaire scoring sheet

If you are not sure, please provide your best guess as far as possible, and answer all questions. All responses will remain anonymous and confidential.

8. Have you heard of the term Compassion Fatigue before?

Yes …… (Go to 1A) No…… (Go to 1B)

C) If yes, please state briefly what you understand by the term Compassion Fatigue

Harder to feel empathy and compassion
The cost of caring/working with those in distress/traumatised
Accumulation over time
Effects – emotional exhaustion, withdrawal/cut off

9. What signs might you notice within yourself if you were suffering from Compassion Fatigue?

Cynicism
Not enjoying work as much/work avoidance e.g. not taking on cases/"Going through the motions"/lack of interest
Withdrawn/cut off
Tense
Anxiety/preoccupied
Exhaustion/tiredness/lethargy
Lack of empathy
Unable to cope

NOT
Stress
Impatience/losing temper/irritability
Mood – hopelessness, moody, crying, depression
Lack of sleep (unless related to preoccupation/anxiety)

10. If you were suffering from Compassion Fatigue, what could you do to help yourself?

Recognising stress signature/signs
Self-care/resilience building/break (stress bucket), includes hobbies/activities
Relaxation
Mindfulness
Talking/debriefing
Compassion satisfaction – reflecting on successes/positive aspects of job

11. What might you notice about a colleague if they were suffering from Compassion Fatigue?

Same as Q2.

12. What do you understand by the term Secondary Traumatic Stress?

Exposure to traumatic material
Similar to signs of PTSD
Intrusive thoughts/images
Avoidance
Hyperarousal/changed perception of the world

13. What do you understand by the term Burnout?

Stress over a long period of time due to the job
Exhaustion
Not being able to cope/carry on – e.g. sickness

Appendix 13

Demographics questionnaire

Demographic questionnaire

Age: 18-24…… 25-34……. 35-44……. 45-54……. 54+……..

Sex: Male …….. Female……

Work email address*:
……
(*We will contact you in around 8 weeks' time to invite you to complete some follow-up questionnaires as part of the research)

Choose one option that best describes your ethnic group or background: (please tick)

White
1. English / Welsh / Scottish / Northern Irish / British
2. Irish
3. Gypsy or Irish Traveller
4. Any other White background

Mixed / Multiple ethnic groups
5. White and Black Caribbean
6. White and Black African
7. White and Asian
8. Any other Mixed / Multiple ethnic background

Asian / Asian British
9. Indian
10. Pakistani
11. Bangladeshi
12. Chinese
13. Any other Asian background

Black / African / Caribbean / Black British
14. African
15. Caribbean
16. Any other Black / African / Caribbean background, please describe

Other ethnic group
17. Arab
18. Any other ethnic group

Job title:

Rank:

Which of these options best describes your role: (please tick)

Police Officer …….. Staff…….

In what side of the SOECA Command do you work? (please tick)

2 …… 5 …….

Within which team do you work?

Years in service (overall):

Years/months working in SOECA Command:

In what cluster/region do you work?

Thank you

Appendix 14

Interim report on findings for London Metropolitan Police

Training police officers in psychological consequences of sexual assault and compassion fatigue prevention (January 2015 interim report)

Background and context

Previous research undertaken by University College London (UCL), in partnership with the Metropolitan Police Service (MPS), found that police officers' perceptions of and empathy towards rape victims were influenced by how those victims present during interview, and that victim presentation was affected by symptoms of trauma and shame. Additionally, qualitative interviews with officers indicated that they were experiencing signs of stress, with 40% expressing a desire for more support in relation to the emotional impact of their work.

Based on these findings, recommendations were made for training to be delivered to officers about psychological consequences of sexual assault in order to help them recognise those processes in the victims they work with. Additionally, in the context of MPS commitment to trying to characterise the job stress associated with different police roles, police officers were provided with training to consider the impact of their work on personal feelings of stress. Specifically the training covered recognition and reduction of compassion fatigue, secondary traumatic stress and burnout.

Current research

The current research aims to evaluate this training. Each training session has two parts, the first considering the impact of psychological trauma and shame on victims and the second thinking about how officers are affected when working with these traumatic accounts.

Officers completed a number of questionnaires before and after the training in order to establish a baseline measure of their experience of stress in the context of their work, and also to investigate the effect that the training has on officers' knowledge of victim trauma and compassion fatigue. Officers also provided feedback about their perception of the usefulness of training for their role.

A total of five trainings will be given as part of the SOECA induction course and an additional five will be given to individual teams: Sutton, Lewisham and Holborn. This interim report provides feedback following the completion of three trainings within the SOECA induction course and focuses on the patterns of compassion fatigue. A future report will discuss the outcome of the training.

Findings to date

Before discussing findings it is worth noting that these are based on a small sample and we did not do formal statistics, therefore some caution is needed in interpreting the results. At the end of the training we will repeat these analyses with a larger sample size and carry out statistical tests.

Compassion satisfaction: Officers from both the sexual offences specialist team (2-side) and the child specialist team (5-side) scored close to the average for compassion satisfaction in their jobs. However, across all ranks, the officers from the child specialist team (5-side) gained more of service).

Compassion fatigue, burnout and secondary trauma: Results suggest that, overall, officers are experiencing average to high average levels of compassion fatigue, suggesting that they may be experiencing some degree of emotional exhaustion as a result of the difficult nature of their role.

Sexual offences officers, particularly PCs and DCs, scored quite highly on the burnout scale, indicating that those officers may be finding it difficult to feel effective in their jobs. In comparison, all of the officers on the child specialist team scored close to the average on this scale.

Results relating to officers' experience of secondary trauma indicate that PCs in the sexual offences team are most likely to be affected by secondary traumatisation as a result of their jobs.

Recognition of trauma in victims and compassion fatigue: Police officers became more confident in their ability to recognise the symptoms of trauma in victims following the training. Additionally, officers' confidence in their ability to recognise signs of compassion fatigue in themselves or a colleague increased.

Usefulness of the training: Out of 32 officers, 88% said that they intended to use at least some of the stress management strategies presented during the training.

Table 1. Officer scores on measures of secondary trauma, burnout and compassion satisfaction

SOECA side	Rank	Number of officers	Secondary traumatic stress (STS)[1]	Compassion satisfaction (CS)[2]	Compassion fatigue (CF)[2]	Burnout (BO)[2]
2 - adult	PC	7	37.4	45.3	58.9	63.3
	DC	4	31.5	43.8	55.3	58.3
	DS	4	31.0	50.0	57.0	53.5
	Average	15	34.1	46.1	57.4	59.3
5 - child	PC	4	24.0	50.8	51.8	51.3
	DC	8	25.0	51.6	55.6	51.4
	DS	6	33.0	55.8	58.7	52.0
	Average	18	27.4	52.8	55.8	51.6

[1]Score: < 28: little/no STS; 28-37: mild STS; 38-43: moderate STS; 44-48: high STS [2] < 44: low CS/CF/BO; 45-56: medium CS/CF/BO; > 57: high CS/CF/BO

Summary and Conclusions

- It appears that the training has been useful in terms of increasing knowledge and confidence in recognising trauma in victims and compassion fatigue in themselves.
- It seems likely that being able to recognise common psychological processes following sexual assault will help officers understand and empathise with the victims they work with.

- We hope that increasing recognition of their own stress response will help officers perform within their role, and also help them to manage their own experience of stress related to their jobs.
- To a certain extent all officers across all roles identified experiencing some elements of compassion fatigue, secondary trauma and burnout as a result of the type of accounts that they hear in the context of their jobs.
- Compared to child specialist officers, it seems that sexual offences officers are experiencing more elements of compassion fatigue, secondary trauma and burnout and experiencing less compassion satisfaction in their role.
- Although it is positive that officers intend to use some of the stress management strategies from the training, it is important to bear in mind these cannot replace the valuable role that Occupational Health play in managing the stresses officers experience in their roles. Whilst self-management techniques are useful, more formal support is also encouraged for officers when needed.

Next steps

Further training sessions for the individual teams and the SOECA induction course will take place until the end of January 2015 and a final summary report will be produced following completion of all sessions. Two full theses based on the separate sections of the training will be produced by June 2015, and are expected to be available by September 2015. These will include recommendations for future training and psychological involvement with the Metropolitan Police Service.

Following the completion of this training, we understand that specific PTSD training will continue to be provided as part of the SOECA induction course by Dr Georgina Smith, a Clinical Psychologist who works at the Haven.

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